



FINAL

Ring of Fire
Proposed Resource Management Plan
and Final Environmental Impact Statement

July 2006

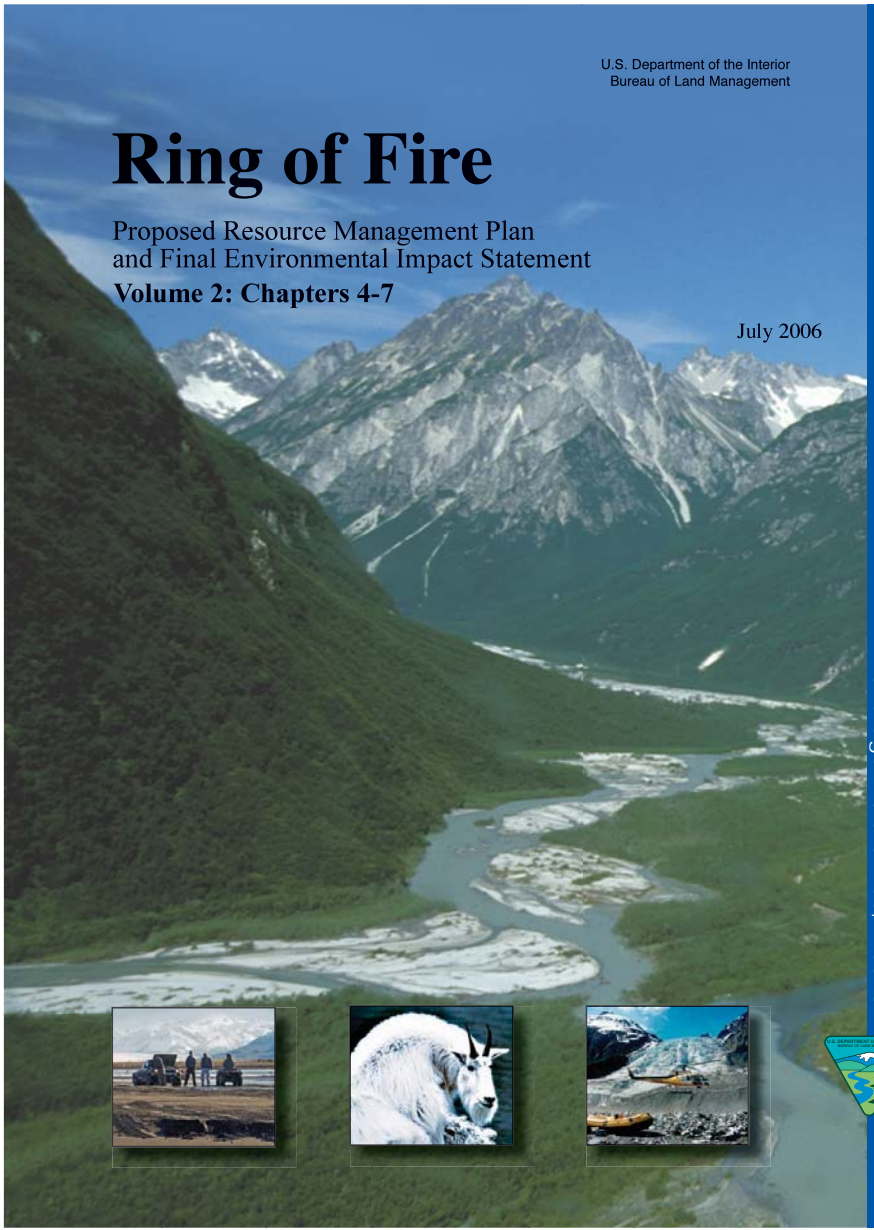
**Volume
2**

U.S. Department of the Interior
Bureau of Land Management

Ring of Fire

Proposed Resource Management Plan
and Final Environmental Impact Statement
Volume 2: Chapters 4-7

July 2006



Anchorage Field Office, Alaska



BLM

The Bureau of Land Management Today

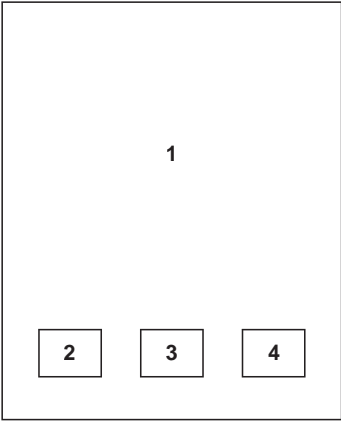
Our Vision

To enhance the quality of life for all citizens through the balanced stewardship of America’s public lands and resources.

Our Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

BLM/AK/PL-06/022+1610+040



BLM File Photos:

- 1. Aerial view of the Chilligan River north of Chakachamna Lake in the northern portion of Neacola Block
- 2. OHV users on Knik River gravel bar
- 3. Mountain goat
- 4. Helicopter and raft at Tsirku River

U.S. Department of the Interior
Bureau of Land Management

Ring of Fire

**Proposed Resource Management Plan
and
Final Environmental Impact Statement**

Prepared By:
Anchorage Field Office
July 2006

Table of Contents

| <u>Section</u> | <u>Title</u> | <u>Page</u> |
|-----------------------|--|--------------------|
| 1.0 | Introduction | 1-3 |
| 1.1 | Purpose and Need | 1-3 |
| 1.2 | Description of the Planning Area | 1-4 |
| 1.2.1 | Planning Regions | 1-5 |
| 1.3 | Scoping, Public Comments on the Draft RMP/EIS, and Issues Analyzed | 1-6 |
| 1.3.1 | Issues Addressed | 1-7 |
| 1.3.2 | Issues Considered but Not Further Analyzed | 1-7 |
| 1.4 | Planning Criteria and Legislative Constraints | 1-9 |
| 1.5 | Planning Process | 1-10 |
| 1.5.1 | Relationship to BLM Policies, Plans, and Programs | 1-11 |
| 1.5.2 | Collaboration | 1-12 |
| 1.6 | Related Plans | 1-14 |
| 1.7 | Document Organization | 1-16 |
| 2.0 | Alternatives | 2-1 |
| 2.1 | General Description of Alternatives | 2-3 |
| 2.1.1 | Alternative A: No Action (Current Management) | 2-3 |
| 2.1.2 | Alternative B: Resource Development | 2-3 |
| 2.1.3 | Alternative C: Resource Conservation | 2-4 |
| 2.1.4 | Alternative D: Proposed Action | 2-4 |
| 2.1.5 | Discussion of the Alternatives | 2-4 |
| 2.2 | Alternatives Considered but Eliminated From Detailed Analysis | 2-5 |
| 2.3 | Alternative Descriptions Related to Key Resource Program Areas | 2-7 |
| 2.3.1 | Lands and Realty | 2-7 |
| 2.3.2 | Fluid Leasable Minerals | 2-17 |
| 2.3.3 | Solid Leasable Minerals | 2-21 |
| 2.3.4 | Locatable Minerals and Salable Minerals | 2-21 |
| 2.3.5 | Off-Highway Vehicles | 2-25 |
| 2.3.6 | Recreation | 2-28 |
| 2.3.7 | Visual Resources | 2-30 |
| 2.3.8 | Wildlife | 2-32 |
| 2.3.9 | Wild and Scenic Rivers | 2-34 |
| 2.4 | Programs with Management Common to All Alternatives | 2-36 |
| 2.4.1 | Air Resources | 2-36 |
| 2.4.2 | Cultural Resources | 2-36 |
| 2.4.3 | Wildland Fire and Fuels | 2-37 |
| 2.4.4 | Fisheries | 2-39 |
| 2.4.5 | Forestry | 2-40 |
| 2.4.6 | Grazing (Livestock and Reindeer) | 2-40 |
| 2.4.7 | Hazardous Materials | 2-40 |
| 2.4.8 | Iditarod National Historic Trail | 2-41 |
| 2.4.9 | Paleontology | 2-42 |
| 2.4.10 | Renewable Energy | 2-42 |
| 2.4.11 | Soils | 2-42 |
| 2.4.12 | Subsistence | 2-42 |
| 2.4.13 | Water Resources | 2-43 |
| 2.4.14 | Floodplains | 2-44 |
| 2.4.15 | Wetlands-Riparian | 2-45 |
| 2.4.16 | Vegetation | 2-45 |
| 2.5 | Comparison of Alternatives | 2-45 |

Table of Contents (continued)

| | | |
|--------|--|-------|
| 2.6 | Comparison of Effects | 2-50 |
| 3.0 | Affected Environment | 3-5 |
| 3.1 | Introduction..... | 3-5 |
| 3.1.1 | Approach | 3-5 |
| 3.1.2 | Methods..... | 3-8 |
| 3.2 | Resources | 3-9 |
| 3.2.1 | Climate | 3-9 |
| 3.2.2 | Air Resources..... | 3-12 |
| 3.2.3 | Physiography..... | 3-17 |
| 3.2.4 | Geology | 3-19 |
| 3.2.5 | Soils..... | 3-24 |
| 3.2.6 | Water Resources..... | 3-28 |
| 3.2.7 | Floodplains | 3-45 |
| 3.2.8 | Fisheries and Aquatic Habitat | 3-49 |
| 3.2.9 | Wildlife | 3-57 |
| 3.2.10 | Vegetation | 3-81 |
| 3.2.11 | Wetlands-Riparian | 3-90 |
| 3.2.12 | Noxious Weeds and Invasive Plant Species | 3-97 |
| 3.2.13 | Wildland Fire and Fuels..... | 3-104 |
| 3.2.14 | Visual Resources | 3-109 |
| 3.2.15 | Paleontological Resources | 3-112 |
| 3.2.16 | Cultural Resources | 3-114 |
| 3.3 | Resource Uses..... | 3-132 |
| 3.3.1 | Forestry | 3-132 |
| 3.3.2 | Grazing..... | 3-135 |
| 3.3.3 | Farmland | 3-136 |
| 3.3.4 | Lands and Realty | 3-137 |
| 3.3.5 | Hazardous Materials | 3-154 |
| 3.3.6 | Leasable Minerals | 3-159 |
| 3.3.7 | Locatable Minerals | 3-165 |
| 3.3.8 | Salable Minerals..... | 3-169 |
| 3.3.9 | Renewable Energy | 3-171 |
| 3.3.10 | Off-Highway Vehicles | 3-174 |
| 3.3.11 | Recreation | 3-178 |
| 3.4 | Special Designations..... | 3-183 |
| 3.4.1 | Special Management Areas | 3-183 |
| 3.5 | Social and Economic..... | 3-192 |
| 3.5.1 | Introduction..... | 3-192 |
| 3.5.2 | Economics | 3-193 |
| 3.5.3 | Social..... | 3-208 |
| 3.5.4 | Socioeconomic Sub-Regional Analysis | 3-210 |
| 3.5.5 | Environmental Justice | 3-213 |
| 3.5.6 | Subsistence | 3-216 |
| 4.0 | Environmental Consequences | 4-1 |
| 4.1 | Introduction..... | 4-1 |
| 4.2 | Assumptions and Methods | 4-2 |
| 4.2.1 | Methods and Approach | 4-2 |
| 4.2.2 | Types of Effects..... | 4-2 |
| 4.2.3 | Analytical Assumptions | 4-2 |
| 4.2.4 | Resource Assumptions | 4-3 |
| 4.2.5 | Treatment of BLM Critical Elements..... | 4-10 |

Table of Contents (continued)

| | | |
|----------|---|-------|
| 4.3 | Direct and Indirect Effects | 4-11 |
| 4.3.1 | Resources | 4-11 |
| 4.3.1.1 | Resources with Effects Common to All Alternatives | 4-11 |
| 4.3.1.2 | Soils | 4-12 |
| 4.3.1.3 | Water Resources | 4-21 |
| 4.3.1.4 | Fisheries and Aquatic Habitat | 4-30 |
| 4.3.1.5 | Wildlife | 4-37 |
| 4.3.1.6 | Vegetation | 4-46 |
| 4.3.1.7 | Wetlands-Riparian | 4-56 |
| 4.3.1.8 | Visual | 4-64 |
| 4.3.1.9 | Paleontological Resources | 4-72 |
| 4.3.1.10 | Cultural Resources | 4-78 |
| 4.3.2 | Resource Uses | 4-85 |
| 4.3.2.1 | Resources with Effects Common to All Alternatives | 4-85 |
| 4.3.2.2 | Lands and Realty | 4-87 |
| 4.3.2.3 | Leasable Minerals | 4-95 |
| 4.3.2.4 | Locatable and Salable Minerals | 4-99 |
| 4.3.2.5 | Off-Highway Vehicles | 4-103 |
| 4.3.2.6 | Recreation | 4-108 |
| 4.3.3 | Special Designations | 4-114 |
| 4.3.3.1 | Special Management Areas | 4-114 |
| 4.3.3.2 | Wild and Scenic Rivers | 4-116 |
| 4.3.4 | Social and Economic | 4-118 |
| 4.3.4.1 | Socioeconomic | 4-118 |
| 4.3.4.2 | Subsistence | 4-123 |
| 4.4 | Cumulative Effects | 4-133 |
| 4.4.1 | Methods | 4-133 |
| 4.4.2 | Reasonably Foreseeable Future Actions | 4-135 |
| 4.4.2.1 | Climate Change | 4-135 |
| 4.4.2.2 | Forestry | 4-135 |
| 4.4.2.3 | Access, Transportation, Utility and Communication Corridors | 4-136 |
| 4.4.2.4 | Locatable, Leasable and Salable Minerals | 4-137 |
| 4.4.2.5 | Recreation Activities | 4-138 |
| 4.4.2.6 | Other BLM Planning Activities | 4-139 |
| 4.4.3 | Cumulative Effects for Resources | 4-141 |
| 4.4.3.1 | Soils | 4-141 |
| 4.4.3.2 | Water Resources | 4-144 |
| 4.4.3.3 | Fisheries and Aquatic Habitat | 4-147 |
| 4.4.3.4 | Wildlife Resources | 4-150 |
| 4.4.3.5 | Vegetation Resources | 4-153 |
| 4.4.3.6 | Wetlands-Riparian Resources | 4-156 |
| 4.4.3.7 | Visual Resources | 4-158 |
| 4.4.3.8 | Paleontological Resources | 4-161 |
| 4.4.3.9 | Cultural Resources | 4-163 |
| 4.4.4 | Cumulative Effects for Resource Uses | 4-166 |
| 4.4.4.1 | Lands and Realty | 4-166 |
| 4.4.4.2 | Leasable Minerals | 4-169 |
| 4.4.4.3 | Locatable and Salable Minerals | 4-171 |
| 4.4.4.4 | Off-Highway Vehicles | 4-174 |
| 4.4.4.5 | Recreation | 4-176 |
| 4.4.5 | Special Designations | 4-179 |

Table of Contents (continued)

| | | |
|---------|--|-------|
| 4.4.5.1 | Special Management Areas..... | 4-179 |
| 4.4.5.2 | Wild and Scenic Rivers..... | 4-180 |
| 4.4.6 | Social and Economic..... | 4-181 |
| 4.4.6.1 | Socioeconomic..... | 4-181 |
| 4.4.6.2 | Subsistence..... | 4-183 |
| 4.5 | Irreversible and Irretrievable Commitment of Resources..... | 4-187 |
| 4.5.1 | Resources..... | 4-187 |
| 4.5.1.1 | Physiography, Geology, and Geomorphology..... | 4-187 |
| 4.5.1.2 | Soils..... | 4-187 |
| 4.5.1.3 | Wetlands and Riparian Areas..... | 4-187 |
| 4.5.1.4 | Visual Resources..... | 4-187 |
| 4.5.1.5 | Cultural Resources..... | 4-188 |
| 4.5.1.6 | Paleontological Resources..... | 4-188 |
| 4.5.2 | Resource Uses..... | 4-188 |
| 4.5.2.1 | Lands and Realty..... | 4-188 |
| 4.5.2.2 | Leasable Minerals..... | 4-188 |
| 4.5.2.3 | Locatable Minerals..... | 4-189 |
| 4.5.2.4 | Salable Minerals..... | 4-189 |
| 4.5.2.5 | Recreation..... | 4-189 |
| 4.5.3 | Social and Economic Environment..... | 4-189 |
| 4.5.3.1 | Socioeconomics..... | 4-189 |
| 4.5.3.2 | Subsistence..... | 4-190 |
| 4.6 | Relationship Between the Local Short-term Uses and Maintenance and Enhancement of Long-term Productivity..... | 4-191 |
| 4.6.1 | Resources..... | 4-191 |
| 4.6.2 | Resource Uses..... | 4-192 |
| 4.6.3 | Social and Economic Environment..... | 4-192 |
| 4.7 | Unavoidable Adverse Effects..... | 4-193 |
| 5.0 | Consultation and Coordination..... | 5-1 |
| 5.1 | Introduction..... | 5-1 |
| 5.2 | Public Participation Opportunities..... | 5-1 |
| 5.2.1 | Scoping..... | 5-1 |
| 5.2.2 | Alternative Development..... | 5-2 |
| 5.2.3 | Draft RMP/EIS Public Involvement..... | 5-2 |
| 5.3 | Consultation..... | 5-3 |
| 5.3.1 | U.S. Fish and Wildlife Service Consultation..... | 5-3 |
| 5.3.2 | National Marine Fisheries Service Consultation..... | 5-3 |
| 5.3.3 | Tribal Consultation..... | 5-3 |
| 5.4 | Collaborative Efforts..... | 5-4 |
| 5.4.1 | Cooperation with the State of Alaska..... | 5-4 |
| 5.5 | Plan Distribution..... | 5-4 |
| 5.6 | Interdisciplinary Team..... | 5-9 |
| 6.0 | COMMENT ANALYSIS REPORT..... | 6-1 |
| 6.1 | Introduction..... | 6-1 |
| 6.2 | Comment Analysis Process..... | 6-2 |
| 6.3 | Public Comment Overview..... | 6-3 |
| 6.4 | Issue Categories..... | 6-5 |
| 7.0 | REFERENCES..... | 7-1 |

Appendices

| | |
|------------|---|
| APPENDIX A | Figures |
| APPENDIX B | Glossary |
| APPENDIX C | Laws, Regulations, and Policies |
| APPENDIX D | Required Operating Procedures, Stipulations, and Standard Lease Terms |
| APPENDIX E | Generally Allowed Uses on State Land |
| APPENDIX F | Special Management Area Objectives |
| APPENDIX G | Mineral Potential Report |
| APPENDIX H | Recreation Opportunity Spectrum Report |
| APPENDIX I | Section 810 Analysis |
| APPENDIX J | BLM Policy for Structure Protection |
| APPENDIX K | Master Memorandum of Understanding Between ADF&G and BLM |

List of Figures

| | |
|---------------|---|
| Figure 1.2-1 | Overview Map of Ring of Fire Planning Area |
| Figure 1.2-2 | Land Ownership Map of Alaska Peninsula and Kodiak Island |
| Figure 1.2-3 | Land Ownership Map of the Southcentral Region |
| Figure 1.2-4 | Land Ownership Map of the Southeast Region |
| Figure 2.3-1 | Special Management Areas of the Southcentral Region |
| Figure 2.3-2 | Special Management Areas of the Southeast Region |
| Figure 2.3-3 | Proposed Area of Critical Environmental Concern (ACEC) – Neacola Mountains |
| Figure 2.3-4 | Proposed Special Recreation Management Area (SRMA) – Haines Block |
| Figure 2.3-5 | Proposed Special Recreation Management Area (SRMA) – Knik River |
| Figure 2.3-6 | Recommended Wild & Scenic River Designations Map of the Alaska Peninsula and Kodiak Island--Alternative C |
| Figure 2.3-7 | Recommended Wild & Scenic River Designations Map of the Southcentral Region--Alternative C |
| Figure 2.3-8 | Recommended Wild & Scenic River Designations Map of the Southeast Region--Alternative C |
| Figure 2.3-9 | Stellar Sea Lion Critical Haulout/Rookery Areas & Steller's Eider Critical Habitat-Cape Lieskof Area |
| Figure 2.3-10 | Areas Open for Fluid Mineral Leasing, Alaska Peninsula and Kodiak Island--Alternatives B and D |
| Figure 2.3-11 | Areas Open for Fluid Mineral Leasing, Southcentral Region--Alternative B |
| Figure 2.3-12 | Areas Open for Fluid Mineral Leasing, Southeast Region--Alternative B |
| Figure 2.3-13 | Areas Open for Fluid Mineral Leasing, Alaska Peninsula and Kodiak Island--Alternative C |
| Figure 2.3-14 | Areas Open for Fluid Mineral Leasing, Southcentral Region--Alternative C |
| Figure 2.3-15 | Areas Open for Fluid Mineral Leasing, Southeast Region--Alternative C |
| Figure 2.3-16 | Areas Open for Fluid Mineral Leasing, Southcentral Region--Alternative D |
| Figure 2.3-17 | Areas Open for Fluid Mineral Leasing, Southeast Region--Alternative D |
| Figure 2.3-18 | Areas Open for Locatable Minerals, Alaska Peninsula and Kodiak Island--Alternatives B through D |
| Figure 2.3-19 | Areas Open for Locatable Minerals, Southcentral Region--Alternative B |
| Figure 2.3-20 | Areas Open for Locatable Minerals, Southeast Region--Alternative B |
| Figure 2.3-21 | Areas Open for Locatable Minerals, Southcentral Region--Alternative C |
| Figure 2.3-22 | Areas Open for Locatable Minerals, Southeast Region--Alternative C |
| Figure 2.3-23 | Areas Open for Locatable Minerals, Southcentral Region--Alternative D |
| Figure 2.3-24 | Areas Open for Locatable Minerals, Southeast Region--Alternative D |
| Figure 2.4-1 | Visual Resource Management Classification, Alaska Peninsula and Kodiak Island--Alternative B |

List of Figures (continued)

| | |
|---------------|---|
| Figure 2.4-2 | Visual Resource Management Classification, Southcentral Region--Alternative B |
| Figure 2.4-3 | Visual Resource Management Classification, Southeast Region--Alternative B |
| Figure 2.4-4 | Visual Resource Management Classification, Alaska Peninsula and Kodiak Island--Alternative C |
| Figure 2.4-5 | Visual Resource Management Classification, Southcentral Region--Alternative C |
| Figure 2.4-6 | Visual Resource Management Classification, Southeast Region--Alternative C |
| Figure 2.4-7 | Visual Resource Management Classification, Alaska Peninsula and Kodiak Island --Alternative D |
| Figure 2.4-8 | Visual Resource Management Classification, Southcentral Region--Alternative D |
| Figure 2.4-9 | Visual Resource Management Classification, Southeast Region--Alternative D |
| Figure 3.2-1 | Climate Zones of the Ring of Fire Planning Area |
| Figure 3.2-2 | Major Ecosystems of the Ring of Fire Planning Area |
| Figure 3.2-3 | Physiography Map of the Ring of Fire Planning Area |
| Figure 3.2-4 | Soil Types of the Aleutian Chain |
| Figure 3.2-5 | Soil Types of the Alaska Peninsula and Kodiak Island |
| Figure 3.2-6 | Soil Types of the Southcentral Region |
| Figure 3.2-7 | Soil Types of the Southeast Region |
| Figure 3.2-8 | Major Watersheds of the Aleutian Chain |
| Figure 3.2-9 | Major Watersheds of the Alaska Peninsula and Kodiak Island |
| Figure 3.2-10 | Major Watersheds of the Southcentral Region |
| Figure 3.2-11 | Major Watersheds of the Southeast Region |
| Figure 3.3-1 | Fire Management Options of the Aleutian Chain |
| Figure 3.3-2 | Fire Management Options of the Alaska Peninsula and Kodiak Island |
| Figure 3.3-3 | Fire Management Options of the Southcentral Region |
| Figure 3.3-4 | Fire Management Options of the Southeast Region |
| Figure 3.5-1 | Percent Change in Population from 1990 to 2000 |
| Figure 3.5-2 | Subsistence Use Areas of the Alaska Peninsula and Kodiak Island |
| Figure 3.5-3 | Subsistence Use Areas of the Southcentral Region |
| Figure 3.5-4 | Subsistence Use Areas of the Southeast Region |
| Figure 3.6-1 | Recreation Opportunity Spectrum Map of Alaska Peninsula and Kodiak Island |
| Figure 3.6-2 | Recreation Opportunity Spectrum Map of the Southcentral Region |
| Figure 3.6-3 | Recreation Opportunity Spectrum Map of the Southeast Region |
| Figure 3.7-1 | Upper Southcentral Subsurface Estate |
| Figure 3.7-2 | Lower Southcentral Subsurface Estate |

List of Tables

| | |
|-------------|---|
| Table 1.5-1 | Steps in the BLM Planning Process |
| Table 1.6-1 | List of Land Management Plans within the Planning Area |
| Table 2.3-1 | Comparison of Alternatives – Lands and Realty |
| Table 2.3-2 | Comparison of Alternatives – Fluid Leasable Minerals |
| Table 2.3-3 | Comparison of Alternatives – Locatable and Salable Minerals |
| Table 2.3-4 | Comparison of Alternatives – Off-Highway Vehicles |
| Table 2.3-5 | Comparison of Alternatives – Recreation |
| Table 2.3-6 | Comparison of Alternatives – Visual Resources |
| Table 2.3-7 | Comparison of Alternatives – Wildlife |
| Table 2.3-8 | Comparison of Alternatives – Wild and Scenic Rivers |
| Table 2.5-1 | Alternatives Summary Table |
| Table 2.6-1 | Summary and Comparison of Effects on Resources by Alternative |
| Table 3.1-1 | Acres within the Ring of Fire Planning Area by Region |
| Table 3.2-1 | National Ambient Air Quality Standards |

List of Tables (continued)

| | |
|--------------|---|
| Table 3.2-2 | Soil Classification |
| Table 3.2-3 | Major Watersheds and Surface Water Resources in the Alaska Peninsula Region |
| Table 3.2-4 | Major Watersheds and Surface Water Resources in the Aleutian Chain |
| Table 3.2-5 | Major Watersheds and Surface Water Resources in the Kodiak Region |
| Table 3.2-6 | Major Watersheds and Surface Water Resources in the Southcentral Region |
| Table 3.2-7 | Major Watersheds and Surface Water Resources in the Southeast Region |
| Table 3.2-8 | Common Subsistence, Commercial, and Sport Fish Species Found in the Ring of Fire Planning Area |
| Table 3.2-9 | List of Threatened, Endangered, Candidate, and Delisted Species Found in the Ring of Fire Planning Area |
| Table 3.2-10 | List of BLM Sensitive Bird and Mammal Species Found in the Ring of Fire Planning Area |
| Table 3.2-11 | BLM Sensitive Plants and their Associated BLM Regions |
| Table 3.2-12 | Alaska Invasive Plant Species and their Associated BLM Regions |
| Table 3.2-13 | Fire Management Options |
| Table 3.2-14 | Prehistoric Timeline of the Alaska Peninsula/Aleutian Chain Region |
| Table 3.2-15 | Historic Timeline of the Alaska Peninsula/Aleutian Chain Region |
| Table 3.2-16 | Prehistoric Timeline of the Kodiak Region |
| Table 3.2-17 | Historic Timeline of the Kodiak Region |
| Table 3.2-18 | Prehistoric Timeline of the Southcentral Region |
| Table 3.2-19 | Historic Timeline of the Southcentral Region |
| Table 3.2-20 | Prehistoric Timeline of the Southeast Region |
| Table 3.2-21 | Historic Timeline of the Southeast Region |
| Table 3.3-1 | Summary of Existing Withdrawals Within the Ring of Fire Planning Area |
| Table 3.3-2 | Activities and Associated Hazardous Materials |
| Table 3.4-1 | Summary of River Segment Eligibility and Tentative Classification |
| Table 3.5-1 | Regional Economic Statistics |
| Table 3.5-2 | Regional Employment by Economic Sector |
| Table 3.5-3 | Average Monthly Employment and Earnings in 2002 |
| Table 3.5-4 | 2004 Tax Types in Ring of Fire Municipalities |
| Table 3.5-5 | Sources of Revenue in 2004 |
| Table 3.5-6 | Population Trends |
| Table 3.5-7 | Regional Ethnic Profile |
| Table 3.5-8 | Regional Socioeconomic Characteristics |
| Table 3.5-9 | Social Statistics |
| Table 3.5-10 | Sub-Regional Economic Statistics |
| Table 3.5-11 | Population Trends in Selected Communities |
| Table 3.5-12 | Ethnic Profile of Selected Communities |
| Table 3.5-13 | Sub-Regional Socioeconomic Characteristics |
| Table 3.5-14 | Sub-Regional Social Statistics |
| Table 3.5-15 | Communities in the Ring of Fire Planning Area with Federally Recognized Tribes |
| Table 3.5-16 | Communities in the Alaska Peninsula/Aleutian Chain Region |
| Table 3.5-17 | Subsistence Resources Used by Residents of the Alaska Peninsula/Aleutian Chain Region |
| Table 3.5-18 | Alaska Peninsula/Aleutian Chain Region Subsistence Harvests by Major Resource Category |
| Table 3.5-19 | Annual Cycle of Selected Subsistence Activities – Alaska Peninsula Subregion |
| Table 3.5-20 | Annual Cycle of Selected Subsistence Activities – Aleutian Islands Subregion |
| Table 3.5-21 | Communities in the Kodiak Region |
| Table 3.5-22 | Subsistence Resources Used by Residents of the Kodiak Region |
| Table 3.5-23 | Kodiak Region Subsistence Harvests by Major Resource Category |

List of Tables (continued)

| | |
|--------------|--|
| Table 3.5-24 | Annual Cycle of Selected Subsistence Activities – Kodiak Region |
| Table 3.5-25 | Communities in the Southcentral Region |
| Table 3.5-26 | Subsistence Resources Used by Residents of the Southcentral Region |
| Table 3.5-27 | Southcentral Region Subsistence Harvests by Major Resource Category |
| Table 3.5-28 | Annual Cycle of Selected Activities – Cook Inlet Subregion |
| Table 3.5-29 | Annual Cycle of Selected Subsistence Activities – PWS Subregion |
| Table 3.5-30 | Communities in the Southeast Region |
| Table 3.5-31 | Subsistence Resources Used by Residents of the Southeast Region |
| Table 3.5-32 | Southeast Region Subsistence Harvests by Major Resource Category |
| Table 3.5-33 | Annual Cycle of Selected Subsistence Activities – Coastal Subregion |
| Table 3.5-34 | Annual Cycle of Selected Subsistence Activities – Riverine Subregion |
| Table 4.7-1 | Unavoidable Adverse Effects |
| Table 5.6-1 | List of Preparers |
| Table 5.6-2 | List of Reviewers |

Acronyms and Abbreviations

| | |
|---------|---|
| AAC | Alaska Administrative Code |
| ACEC | Area of Critical Environmental Concern |
| AD | common era/Anno Domini |
| ADEC | Alaska Department of Environmental Conservation |
| ADF&G | Alaska Department of Fish and Game |
| ADNR | Alaska Department of Natural Resources |
| ADOT&PF | Alaska Department of Transportation and Public Facilities |
| AEB | Aleutians East Borough |
| AFS | Alaska Fire Service |
| AFO | Anchorage Field Office |
| AHMA | Aquatic Habitat Management Area |
| AHRS | Alaska Heritage Resource Survey |
| AIWFMP | Alaska Interagency Wildland Fire Management Plan |
| AKEPIC | Alaska Exotic Plant Information Clearinghouse |
| ALTP | Alaska Land Transfer Program |
| AML | Abandoned Mine Lands |
| ANHP | Alaska Natural Heritage Program |
| ANILCA | Alaska National Interest Lands Conservation Act |
| ANCSA | Alaska Native Claims Settlement Act |
| AO | Authorized Officer |
| APD | Applications for Permit to Drill |
| ARPA | Archaeological Resource Protection Act |
| AS | Alaska Statute |
| AST | aboveground storage tank |
| ASTt | Arctic Small Tool Traditional |
| ASQ | allowable sale quantity |
| ATV | all-terrain vehicle |
| AVO | Alaska Volcano Observatory |
| AWCA | Aleutians West Census Area |
| BLM | Bureau of Land Management |
| BC | years before the birth of Christ |
| BP | years before present |
| CAA | Clean Air Act |
| CBJ | City and Borough of Juneau |
| CBNG | coalbed natural gas |
| CEQ | Council on Environmental Quality |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CERCLIS | Comprehensive Environmental Response, Compensation, and Liability Information System |
| cfm | cubic feet per minute |
| CFR | Code of Federal Regulations |
| cfs | cubic feet per second |
| CHA | critical habitat area |
| CIMMC | Cook Inlet Marine Mammal Commission |
| CNF | Chugach National Forest |
| CNIPM | Strategic Planning Committee for Noxious and Invasive Plant Management |
| CO | carbon monoxide |
| CSU | conservation system unit |
| CWA | Clean Water Act |
| DCCED | Department of Commerce, Community, and Economic Development |
| DO/L | dissolved oxygen per liter |

Acronyms and Abbreviations (continued)

| | |
|-------------------|--|
| DOD | Department of Defense |
| DOF | Department of Forestry |
| DPS | distinct population segment |
| EA | Environmental Assessment |
| EAFB | Elmendorf Air Force Base |
| EFH | essential fish habitat |
| EIS | Environmental Impact Statement |
| EO | Executive Order |
| ESA | Endangered Species Act |
| ESU | Evolutionary Significant Unit |
| °F | degrees Fahrenheit |
| FEMA | Federal Emergency Management Agency |
| FERC | Federal Energy Regulation Commission |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| FLPMA | Federal Land Policy and Management Act |
| FR | Federal Register |
| FRAP | Fort Richardson Army Post |
| FRPA | Alaska Resources and Forest Practices Act |
| ft | foot/feet |
| FUDS | Formerly Used Defense Sites |
| FWFMP | Federal Wildland Fire Management Policy |
| gpm | gallons per minute |
| HAP | hazardous air pollutant |
| HUC | hydrologic unit code |
| IAP | Integrated activity plan |
| IC | Interim Conveyance |
| IPM | Integrated Pest Management |
| IRA | Indian Reorganization Act |
| ISA | Instant Study Area |
| KGB | Ketchikan Gateway Borough |
| KGRA | known geothermal resource area |
| KIB | Kodiak Island Borough |
| km | kilometer |
| KMDA | known mineral deposit area |
| KPB | Kenai Peninsula Borough |
| LPB | Lake and Peninsula Borough |
| MFP | Management Framework Plan |
| µg/m ³ | micrograms per cubic meter |
| mg/L | milligrams per liter |
| MLA | Mineral Leasing Act |
| MMBF | million board feet |
| MOA | Municipality of Anchorage |
| MOU | Memorandum of Understanding |
| MSA | Management Situation Analysis |
| MSB | Matanuska-Susitna Borough |
| MSFCMA | Magnuson-Stevens Fishery Conservation and Management Act |
| NAAQS | National Ambient Air Quality Standards |
| NAGPRA | Native American Graves Protection and Repatriation Act |
| National System | National Wild and Scenic Rivers System |
| NEPA | National Environmental Policy Act |

Acronyms and Abbreviations (continued)

| | |
|-------------------|---|
| NFIP | National Flood Insurance Program |
| NFMA | National Forest Management Act |
| nm | nautical mile |
| NHPA | National Historic Preservation Act |
| NHT | National Historic Trail |
| NMFS | National Marine Fisheries Service |
| NO ₂ | nitrogen dioxide |
| NOAA | National Oceanic and Atmospheric Administration |
| NOI | Notice of Intent |
| NPS | National Park Service |
| NRCS | Natural Resource Conservation Service |
| NRHP | National Register of Historic Places |
| NSO | No Surface Occupancy |
| NWR | National Wildlife Refuge |
| O ₃ | ozone |
| OHMP | Office of Habitat Management and Permitting |
| OHV | off-highway vehicle |
| ONA | Outstanding Natural Area |
| ORV | outstandingly remarkable value |
| Pb | Airborne lead |
| PCB | polychlorinated biphenyl |
| PILT | payments in lieu of taxes |
| PLO | Public Land Order |
| PM _{2.5} | particulate matter less than 2.5 microns |
| PM ₁₀ | particulate matter less than 10 microns |
| ppm | parts per million |
| PRP | potentially responsible party |
| PSD | Prevention of Significant Deterioration |
| PV | photovoltaic |
| PWS | Prince William Sound |
| RAC | Regional Advisory Council |
| RCRA | Resource Conservation & Recovery Act |
| RFD | Reasonable Foreseeable Development |
| RFFA | reasonably foreseeable future action |
| RMP | Resource Management Plan |
| RMZ | Recreation Management Zone |
| RNA | Research Natural Area |
| ROD | Record of Decision |
| ROP | Required operating procedure |
| ROS | Recreation Opportunity Spectrum |
| ROW | right-of-way |
| R&PP | Recreation and Public Purposes |
| SCB | Sitka City and Borough |
| SFA | Sustainable Fisheries Act |
| SHPO | State Historic Preservation Officer |
| SIP | State Improvement Plan |
| SMA | Special Management Area |
| SO ₂ | sulfur dioxide |
| SRMA | Special Recreation Management Area |
| SRP | special recreation permit |
| STATSGO | State Soil Geographic |

Acronyms and Abbreviations (continued)

| | |
|--------|--------------------------------------|
| TA | tentative approval |
| T&E | threatened and endangered |
| TNF | Tongass National Forest |
| U.S. | United States |
| U.S.C. | United States Code |
| USACE | U.S. Army Corps of Engineers |
| UAF | University of Alaska, Fairbanks |
| USBOM | U.S. Bureau of Mines |
| USDA | U.S. Department of Agriculture |
| USDOI | U.S. Department of the Interior |
| USEPA | U.S. Environmental Protection Agency |
| USFS | U.S. Forest Service |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| UST | underground storage tank |
| VRM | Visual Resource Management |
| WSA | Wilderness Study Areas |
| WSRA | Wild and Scenic Rivers Act |
| YCB | Yakutat City and Borough |

CHAPTER 4:

ENVIRONMENTAL CONSEQUENCES



4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This chapter describes the predicted consequences, or potential effects, on the physical, biological, and human environment from implementing the alternatives described in Chapter 2. The chapter begins with a summary of the methods and approach used for the effects assessment, describes the type of effects analyzed, and summarizes the assumptions used during the analyses.

Effects are defined as modifications to the environment, as it presently exists, that are brought about by external actions or events. These effects may be beneficial or adverse, and result from the action directly or indirectly. Effect levels are determined by their magnitude (measure of change), extent (size of change), duration (e.g., temporary, short- to long-term), and likelihood of change. The characteristics of an effect level vary per resource category; however, in general an effect that persists more than a few years would be considered long-term. Effects that would allow the resource to revert back to its predisturbance condition within a few years of the activity would be considered short-term. The magnitude or extent of an effect is dependent upon the current condition of the resource.

4.2 Assumptions and Methods

4.2.1 Methods and Approach

The analysis of direct, indirect and cumulative effects associated with the proposed alternatives is required by Bureau of Land Management (BLM) planning regulations and by the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA). These effects analyses present the best estimates of direct, indirect, and cumulative effects.

The type and level of effects that could result from implementing the alternatives have been identified using the information provided in Chapter 3, which provides a description of the current condition of the environment. Activities that may occur in the reasonably foreseeable future within the Ring of Fire planning area were also considered as part of the analysis of cumulative effects. Effects analyses and conclusions are based on interdisciplinary team knowledge of the resources and the Ring of Fire planning area, information provided by BLM or other agency experts, pertinent literature review, and professional judgment. The inherent difficulty of a broad Proposed Resource Management Plan (PRMP)/Final Environmental Impact Statement (FEIS) such as this is to describe the potential effects from a project action when exact locations of project sites are unknown. Therefore, the analyses in this chapter are often qualitative. Quantitative data, commonly based on past experience, have been included where available. Under each alternative, only the resources or resource uses pertinent to that analysis of effects will be discussed.

4.2.2 Types of Effects

The analyses include three types of effects as described below. *Direct effects* are caused by the proposed action and occur at the same time and place. *Indirect effects* are caused by the proposed action and are later in time or farther removed in distance, but are still reasonably foreseeable. *Cumulative effects* are the effects on the environment resulting from the incremental effects of the proposed actions when added to other past, present, and reasonably foreseeable future actions (RFFAs) regardless of what person(s) or agency (federal or non-federal) undertakes those actions (40 Code of Federal Regulations [CFR] 1508.7 and 1508.8).

4.2.3 Analytical Assumptions

Assumptions and estimates were made to facilitate the analysis of the project effects. These assumptions set guidelines and provide reasonably foreseeable projected levels of development that would occur within the planning area over the next 20 years. The assumptions should not be interpreted as constraining or redefining the management objectives and actions proposed for each alternative that is described in Chapter 2. If no assumptions were made for a resource, that resource is not discussed in the following sections.

- Sufficient funding and personnel would be available for implementation of the final decision.
- Implementation of actions from any of the PRMP/FEIS alternatives would be in compliance with all valid existing rights, federal regulations, bureau policies, and other requirements.

- Appropriate maintenance would be carried out to maintain the functional capability of all developments.
- The discussion of effects is based on the best available data. Knowledge of the planning area and professional judgment, based on observation and analysis of conditions and responses in similar areas, are used to infer environmental effects where data are limited.
- Acreage figures and other numbers used in the analyses are approximate projections for comparison and analytical purposes only. Readers should not infer that they reflect exact measurements or precise calculations.
- State and Native land entitlements will be met sometime within the next five to 10 years as land selections are adjudicated. This will reduce the acreage of current BLM-managed lands within the Ring of Fire planning area.

4.2.4 Resource Assumptions

Air Resources

- Increasing uses of the area for recreation may cause deterioration in current quality of the air, especially during seasons of high visitation.
- The most likely causes of deterioration in air quality in the Ring of Fire planning area are emissions from fire (wildland fire or prescribed), dust from travel on roads, volcanic emissions, and dust and exhaust from construction or development activities.

Soils

- Most of the Ring of Fire planning area lies near the southern boundary of discontinuous permafrost where only rare patches of permafrost exist (Pewe 1975). The effect on soils as a result of a decrease of permafrost is probably negligible.

Water Resources

- Demand for water (quantity and quality), especially in the planning area's clear-water streams and rivers, will increase as a result of increasing recreation use, and increasing population in the Ring of Fire planning area. Water quality requirements would be achieved through the use of the Required Operating Procedures (ROPs).

Fisheries and Aquatic Habitats

- The demand for fisheries resources from increased sport and subsistence fishing will increase in the foreseeable future, resulting in increased pressure on populations in the planning area. There is a direct correlation between the amount of quality habitat and fish populations. Potential effects to habitat quality will increase. BLM will continue to manage to protect and maintain the genetic integrity of Alaska's wild populations of fish.

Wildlife

- There is a direct relationship between the quantity and quality of habitat and the size, diversity, and viability of species populations. Habitat requirements for any particular species cannot be met everywhere (species-specific needs are often very site-specific). Habitat may be only seasonally available due to elevation, aspect, and type of vegetation present and proximity of human disturbance. Habitat conditions will vary due

to natural processes and wildlife uses even if human-caused influences are reduced or eliminated.

- Management actions intending to benefit a specific habitat for a priority species will influence any other species occurring in that same habitat. Therefore, effects to wildlife populations and habitat are not discrete since actions may benefit one species while having an adverse, or a beneficial, effect on another. Maintaining high quality habitat conditions can have some influence on reducing the severity of outbreaks of, and subsequent losses from diseases, but the prevalence in the environment of various diseases cannot be fully controlled, particularly at chronic levels of occurrence.
- Demand for improved health of wildlife habitat will increase given the increase in demand for caribou and moose within the planning area. Demands on habitat from caribou and moose will generally increase as ungulate populations increase, though populations will fluctuate over the course of the planning period.

Special Status Wildlife Species

- Continuing and additional inventory will identify additional sensitive status species on lands administered by BLM, and will likely include the expansion of known ranges of species currently on the BLM Alaska special status species list. Nationally, demand for protection of species listed under the Endangered Species Act (ESA), as well as for species not yet listed, but of concern, will likely increase. Demand for protection of special status species will increase as inventory indicates specific habitat niches or requirements, and as increased visitor use or development activities place demand on associated habitats.

Vegetation

- Demand for healthy forests and woodlands will increase based on desires for wildlife habitat and maintenance of healthy upland communities to support watershed health and support sustainable production of forest products. Demand for subsistence uses associated with these vegetation types will also increase. These uses include personal firewood and house log gathering, as well as berry picking and collection of plant materials such as diamond leaf willow for arts and crafts. Vegetation treatments to forests, woodlands, and shrublands would promote successional changes that will restore vigor and vegetation production, create a mosaic of vegetation types, and promote maintenance of early-seral shrub-dominated plant communities.
- Both natural and human-caused fire events will likely increase as fuel loading increases in both black spruce and beetle-kill white spruce. Fires will most likely increase in size and intensity in the near future due to fuel loading, and increasing temperatures. Fire suppression efforts will continue in areas of urban interface and where wildland fire would produce undesirable resource effects.

Wetland-Riparian

- The condition of riparian communities will be maintained at proper functioning condition as management measures are implemented. Demand on specific riparian and wetland areas will increase with increased recreational use. This will result in localized effects to riparian vegetation, but not at levels that threaten proper functioning condition.

Invasive Plant Management

- Inventory efforts will continue to identify specific occurrences of noxious weeds and invasive plants. The demand for control of weeds will increase as general public knowledge of the detriments of noxious weeds increases. Increases in invasive species will reduce habitat quality and quantity.

Wildland Fires and Fuels Management

Wildland Fire

- Wildland fire frequency, intensity, and complexity are expected to increase over the planning period due to population gains, wildland urban interface expansion, complex land ownership patterns, road improvements, and access development to currently remote areas, more recreational use, vegetation (fuel) conditions, and climate and weather trends. Cooperative interagency fire planning and suppression, as described in Chapter 3, will continue. Management option designations will be changed over time to respond to specific resource or urban-interface concerns.

Fuels Management

- Fuels management techniques will be utilized with more frequency to accomplish habitat improvements and fuels reduction objectives. Wildland fire use and prescribed burn treatments will create mosaic patterns on the landscape, which in turn maintain structure and diversity.

Visual

- Scenic resources will remain in demand from local residents who want to maintain scenic quality, local businesses that depend on tourism, and an increasing level of recreational users within the Ring of Fire planning area. Increasing tourism will increase the value of scenic views, undeveloped landscapes and open spaces.

Paleontological Resources

- Federal undertakings and unauthorized uses have the potential to cause irreversible disturbance and damage to non-renewable paleontological resources. BLM would continue to mitigate effects to paleontological resources from authorized uses, through project abandonment, redesign, and specimen recovery. Geologic formations with exposures containing vertebrate and non-vertebrate fossils would continue to be affected from natural agents, unauthorized public use, and vandalism.
- The demand for use of both vertebrate and non-vertebrate fossils is expected to increase. The causal-use and collection of non-vertebrate fossils by “rock hounds” and fossil collectors is expected to increase. Scientific interest in vertebrate fossils by the academic community is also expected to remain at current levels or possibly increase slightly.

Cultural Resources

- Federal undertakings and unauthorized uses have the potential to cause irreversible disturbance and damage to non-renewable cultural resources. BLM will continue to mitigate effects to cultural resources from authorized uses through project abandonment, redesign, and if necessary data recovery investigations in accordance with the 1997 BLM National Cultural Programmatic Agreement and the 1998 Implementing Protocol

with the Alaska State Historic Preservation Officer (SHPO) for managing cultural resources on lands administered by the BLM in Alaska.

- Cultural resources would continue to be found and evaluated for eligibility to the National Register of Historic Places (NRHP) as additional inventories are completed for compliance projects. Eligible cultural resources would continue to be treated similarly and equally in terms of type, composition, and importance, but many will continue to deteriorate through natural agents, unauthorized public use, and vandalism. BLM will continue to consult with Native tribes and communities, and with village corporations on traditional cultural properties and values that are of concern to them.
- All archaeological resources will be assessed according to BLM use categories. The demand for use of cultural resources will increase. Interest from the general public in historical tourism from village corporations and councils in traditional uses will increase. The demand to use cultural resources by the academic community in scientific research will increase slightly.

Forestry

- Opportunities that utilize forest products in return for other resource service work will continue and may increase slightly. Vegetation treatments will improve timber stand quality and quantity. Because of inaccessibility, insects and disease will continue to contribute to the loss of growth in white spruce stands. Local demand for forest products, such as firewood and house logs, will increase as the population in the Ring of Fire planning area increases. Historically, timber harvests have not exceeded approximately 100,000 board feet annually, typically representing a disturbance of approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest or only slightly higher would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Given the relatively low value and limited demand for the timber in the Ring of Fire planning area, most of the timber harvested would come as an ancillary benefit from other construction projects such as right-of-way (ROW) clearing or other permitted activities. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula.

Grazing

- No livestock grazing currently occurs under permit. It is assumed that no additional requests for livestock grazing authorization will occur. The only anticipated grazing use would be incidental use associated with recreational and commercial use of pack animals for hunting, fishing, and other backcountry recreation. Any authorization for grazing by pack animal will be examined on a case-by-case basis.
- It is anticipated that no requests for reindeer grazing permits will occur. There are no current reindeer grazing authorizations within the Ring of Fire planning area.

Leasable Minerals

- No development of coal, oil shale, phosphate, or geothermal resources is anticipated within the next 10 to 15 years. Oil and gas exploration will likely occur as described in the Reasonably Foreseeable Development (RFD) scenario (BLM 2004r). The RFD scenario predicts activity based on geologic potential, as well as past and present exploration and development, accessibility, and existing infrastructure.

- It is assumed that 1,000 miles of seismic exploration will be conducted on lands within the planning area.
- Based on the history of oil exploration wells drilled in the Cook Inlet Basin, it is assumed that roughly 15 oil exploration wells would be drilled in the planning area over the next 15 years.
- It is assumed that in that period, 26 gas exploration wells would be drilled within the Ring of Fire planning area.
- It is assumed that 60 development gas wells, i.e., wells with existing fields, would be drilled during the next 15 years.
- Coal bed natural gas (CBNG) is considered separately from conventional oil and gas. CBNG in the Cook Inlet Basin would likely occur in the Matanuska-Susitna Valley and in the southern Kenai Peninsula near Homer (Figures 3.7-1 and 3.7-2). Although these locations are part of the mature Cook Inlet oil and gas basin, we consider this a frontier area regarding CBNG exploration due to the limited exploration efforts to date in the Matanuska-Susitna Valley. Under this RFD scenario for CBNG production, recoverable reserves are assumed to be 1.4 trillion cubic feet. For purposes of analysis, we assume that production would be from a single field either in the Matanuska-Susitna Valley or on the southern Kenai Peninsula. The CBNG field would be similar in extent to the former Pioneer Unit (i.e., a field encompassing approximately 50,000 acres of subsurface). To maximize recovery and minimize waste, a 100-acre well spacing would be employed and 500 wells (250 pads or two wells per pad) would ultimately be drilled. Ten percent of these wells would be abandoned as dry holes. Projected short-term acreage disturbance due to CBNG exploration, development, and production under this scenario would total approximately 1,481 acres. Long-term disturbance would be roughly 905 acres.
- It should be noted that BLM's land comprises only a portion of the total estimated disturbance acreage. Total surface disturbance within the Ring of Fire planning area (for all ownerships, not just BLM) of projected short-term oil and gas exploration, development, and production, including CBNG is approximately 2,558 acres. Long-term disturbance would be roughly 1910 acres. BLM-administered lands, selected lands and split estate lands, comprise less than two percent of the area designated as having high oil and gas development potential within the Cook Inlet Basin. If development occurs in this area of the basin, less than 52 acres will be disturbed by oil and gas development, including CBNG, on BLM-administered land, selected lands, or on land where BLM manages the subsurface estate and the surface is privately owned. However, to err on the side of caution, and because it is theoretically possible no matter how unlikely, that all development could occur on BLM-managed land, we have analyzed effects using the acreages of combined potential oil and gas and mineral disturbance (2,558 acres oil and gas disturbance + 60 acres mineral disturbance = 2,618 acres total).

Locatable Minerals

Placer Gold

- Placer gold mining has been the most common type of mining to occur in the Ring of Fire planning area. The RFD for locatable minerals concludes that historical data indicate that smaller placer mines will be more likely to reappear in the Ring of Fire planning area than either medium or large placer mines (Appendix G). Increases in average gold prices would likely be required before any significant placer mining activity were to occur in the Petersville-Cache Creek, Collinsville, Hatcher Pass, and Porcupine Creek areas (historic mining areas) of the Ring of Fire planning area. Regardless of the amount of land made available for mineral entry, development would be in the range of

one to five acres per property including concurrent reclamation, totalling less than 60 acres on BLM land.

Other Deposits

- No lode mineral production is expected to occur on BLM unencumbered lands in the Ring of Fire planning area, though there may be a small potential for disturbance from access roads/airstrips, field and support camps, trenching and drilling activities, and possible powerline construction activities, if development occurs elsewhere and requires use of BLM-managed lands.

Salable Minerals

- Demand for gravel will increase as road maintenance and construction continue on State highways, State lands, Native corporation lands, and private lands. There appears to be an ample supply of sand and gravel located on private lands near communities with existing infrastructure to support development of these resources. BLM lands are generally remote, roadless and not in areas with projected development needs making them less attractive material sources than private lands. While it is unlikely that any salable mineral extraction would occur on BLM-managed lands, if a sale did occur, it would include approximately 10 acres of ground disturbance from extraction of the pit and construction of a road, likely to be less than a mile long.

Renewable Energy

- Considering such factors as the amount and intensity of sunlight, wind velocity, proximity to roads and electric transmission facilities it is anticipated that no applications will be received to permit or lease commercial construction of facilities on BLM-managed lands.

Lands and Realty

Land Use Authorization

- There will be a continued demand for land use authorizations, such as ROWs and various types of leases and permits within the Ring of Fire planning area. The demand for these land use authorizations will fluctuate directly with the degree of economic growth and development occurring within and adjacent to the Ring of Fire planning area. BLM has granted an average of five ROWs per year over the last five years for facilities like driveways, power lines, and short segments of roads. It is anticipated that these numbers will remain constant for the foreseeable future.

Change in Land Ownership

- State and Native corporation land entitlements will be met within the Ring of Fire planning period, with the BLM retaining management on approximately 15 to 25 percent of lands currently selected by State and Native corporations. Once land status is resolved, there will be a demand, both from within and outside the BLM, for land ownership adjustments to improve the manageability of federal and non-federal lands.

Access

- Demand for adequate access – the physical ability and legal right of the public, agency personnel, and authorized users to reach public lands – will remain constant or increase

slightly for the foreseeable future. Access to public lands will decrease slightly as Native corporation entitlements are met and as private lands become more developed.

Roads

- Demand for roads within the planning area to access private inholdings or to support mineral exploration and development or other resource developments on or across from BLM-managed lands will increase. Current demand for road development is limited due to the nature and location of the lands within the Ring of Fire planning area.

Transportation and Utility Corridors

- No transportation or utility corridors have been identified as a result of this planning effort. The BLM recognizes that they may be proposed in the future and will consider them at that time.

Recreation

- Demand for recreational use of public lands is expected to increase. Because much of the BLM-managed land within the Ring of Fire planning area generally consists of isolated parcels that are not accessible by road, increases will be focused on sport hunting and fishing, recreation OHV use (including snow machines), hiking and canoeing/rafting. Currently, BLM manages 30 Special Recreation Permits (SRPs) within the Ring of Fire planning area. Commercial recreation applications, including heli-skiing and touring, are predicted to increase from the current three, to as many as five applications in the next five years. These are primarily for operations in the Haines-Skagway area in the Southeast region. Other emerging recreational activities include the growing OHV use of the few BLM lands that are road accessible, including the Knik River area.

Off-Highway Vehicles

- Demand for access and use of OHV trails will increase. The use of OHVs for recreational purposes (including sport fishing) will increase while the use of OHVs for hunting and subsistence will remain stable or increase slightly.
- Changes in OHV design and technology will continue, enabling OHV users to range into areas that were once thought of as inaccessible due to terrain and water or soil features.
- Much of the OHV use within the Ring of Fire planning area will remain centered in the Knik River area. OHV use in the Knik River area will continue to increase both on and off of established trails. Heaviest use will occur in the generally flat, lowland floodplain of the river valley. These lowland trails are made up of varying components of sand, gravel, and glacial silt, with little vegetation coverage. Many of these sites are subject to ice movement and flooding each spring during breakup, which sometimes obliterates previous trail disturbance.
- Upland OHV use takes place on better-drained sites with existing vegetation and some degree of slope. These trails are more susceptible to damage by increases in vehicle traffic. As these trails become more traveled, they will deteriorate through rutting and eventually become impassible, causing OHV users to seek alternate trail locations thereby increasing surface disturbance in the area. These trails are primarily used to access higher elevations in the area during hunting season.

Wild and Scenic Rivers

- Recreational use of the river corridors being considered for proposed Wild and Scenic River (WSR) designation will increase. If the proposed corridors are designated, prescribed management will protect the Outstandingly Remarkable Value (ORV) for which the rivers were designated, requiring a mix of education and regulatory measures.

Economic

- The economic effect analysis is based on BLM-related management changes. Other factors that would affect the local economy, such as population growth, tourism trends, or resource extraction on other lands, are assumed to be the same for all alternatives.

Social

- The population within the Ring of Fire planning area will increase over the planning period.
- Public health and safety issues will receive priority consideration in the management of public lands. Demand for safe visits will increase with increasing numbers of public land users.

Environmental Justice

- As a government agency, BLM will maintain a government-to-government relationship with federally-recognized Native tribes within the Ring of Fire planning area. Residents within the Ring of Fire planning area utilize Native and village corporation lands as well as BLM public lands for traditional subsistence activities, and will continue to do so. Through the planning process, BLM has initiated consultation with different Tribal entities. This consultation will continue throughout the planning process.

Subsistence

- BLM will continue to play a role in the management of subsistence resources on public lands. The demand for subsistence resources will increase following current trends.

4.2.5 Treatment of BLM Critical Elements

BLM considers 14 items as “Critical Elements of the Human Environment” that must be addressed during environmental analysis.

Prime or Unique Farmlands are not currently present on BLM-administered lands covered by this plan. The remaining 13 critical elements are addressed pertinent to sections of Chapter 4 that are identified as containing information relating to a critical element. These include: Air Resources, Areas of Critical Environmental Concern (Special Management Areas [SMAs]), Cultural Resources, Environmental Justice, Native American Religious Concerns, Threatened and Endangered Species, Hazardous or Solid Wastes, Water Resources, Wetlands-Riparian, Wilderness, WSRs, Invasive Plants, and Floodplains.

Environmental Justice and Native American Religious Concerns are addressed throughout Chapter 4, where applicable.

4.3 Direct and Indirect Effects

4.3.1 Resources

4.3.1.1 Resources with Effects Common to All Alternatives

The following resources would have similar effects under all four alternatives. In most cases potential direct and indirect effects would be minimal, negligible, or non-existent.

4.3.1.1.1 Air Resources

Much of the Ring of Fire planning area is designated as unclassifiable, with regard to air resources (USEPA 2004a). On some level, air resources in the Ring of Fire planning area will be affected regardless of which alternative is selected. Although there will be varying degrees of effects throughout the planning area, one can expect to find effects of greater magnitude under Alternative B that proposes greater areas for potential mineral development or OHV activity. These activities will often be around population centers and/or various areas of economic or recreational interest (e.g. mineral exploration and extraction or scenic camping locations). However, the scattered nature of BLM lands and low potential for reasonably foreseeable mineral development indicate that effects on air resources would be minimal under all alternatives, and in the case of OHV activity, short-term in nature.

4.3.1.1.2 Climate, Physiography, and Geology

The proposed alternatives would have no direct or indirect effects on climate in the Ring of Fire planning area. Due to the fragmented nature of BLM lands, the low likelihood of development associated with leasable, locatable, and salable minerals (Section 4.2), and the short-term effects associated with OHV use, effects on the physiographic and geologic resources are expected to be negligible.

4.3.1.1.3 Floodplains

The land management actions proposed under any of the alternatives would have minimal effects to floodplains. Alternative B proposes more areas for potential mineral development and OHV activity, so any effects on floodplains under this alternative would be greater in magnitude than under any of the other alternatives. However, the scattered nature of BLM lands and low potential for reasonably foreseeable mineral development indicate that effects on floodplains would be minimal under all alternatives.

4.3.1.1.4 Wildland Fires and Fuels Management

BLM will continue to authorize suppression actions or fuel treatments on BLM-managed land to hinder wildland fire from occurring or spreading to higher management option designation on BLM-managed lands, inholdings or those of adjacent landowners. As a member of the Alaska Wildland Fire Coordinating Group, BLM will continue to work cooperatively with agencies and groups on the development and use of Alaska interagency fire management option classifications, priorities, and to use the established change protocol to modify boundaries and fire management options. There would be no direct, indirect, or cumulative effects to fires and fuels management under any of the proposed alternatives; therefore, no further consideration of effects to fires and fuels management is included in this document.

4.3.1.2 Soils

Potential effects to soil resources can be affected by management decisions, through changing erosive actions of wind and water, or by limiting the productivity of the soil. Soil resources are also linked to water resources because excessive erosion and sediment transportation can degrade water quality and/or habitat.

4.3.1.2.1 Direct and Indirect Effects Common to All Alternatives for Soils

Ultimately, the magnitude of the effects on soils will be a function of the extent and nature of action taken, as well as the soil composition at a particular location.

There is a correlation between loss of organic matter and compaction: soil compaction can lead to loss of organic matter. Thus, the management actions and possible adverse effects described under compaction will also be applicable to loss of organic matter. ROPs, such as limiting overland movement where roads are not available to times when soils are frozen and sufficient snow cover is available to prevent soil compaction, are designed to minimize effects to soil resources.

Hazardous Materials Effects on Soils (Common to All)

The BLM management actions under all alternatives for hazardous materials may beneficially affect soil quality by ensuring adequate protections against the pollution of soil from hazardous materials.

Forestry Effects on Soils (Common to All)

Forested vegetation is integral to maintaining the health of soil resources, particularly due to the ability of vegetation to pump water from the soil, intercept heavy rain and snow before soil degradation occurs, and provide protective cover that minimizes erosion. Timber harvesting can have varying degrees of adverse effects on soils, such as compaction and soil degradation. Historically, timber harvests have not exceeded approximately 20 acres per year within the planning area, with little road construction activity. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvests, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Any effects from timber harvesting on soils would be localized in scale.

Lands and Realty Effects on Soils (Common to All)

Access (ROWs) – BLM manages access across public lands through ROW grants. Construction of access roads, railroads, and gravel pads in the ROW areas may adversely affect soil in the local region by increasing the amount of compacted soils in and around ROW areas.

Access (17(b) Easements) – BLM will manage ANCSA 17(b) easements that will allow limited rights for access across private native corporation lands. Construction of access roads or trails on ANCSA 17(b) easements may adversely affect soil in the local region by increasing the amount of compacted soils in and around the easement.

Management of conservation easements may have a positive effect on soils because development would be restricted on parcels of lands with conservation easements.

Disposals and Acquisitions – Disposal of BLM lands results in removal of the land from the public domain due to State entitlements, Native settlements, private or State exchanges, mining patents, Recreation and Public Purposes (R&PP) sales, and Federal Land Policy and Management Act (FLPMA) sales. The conveyance of BLM-managed lands removes them from the requirements of BLM policies that currently provide some degree of protective measures to soil resources (e.g. some management of soil-protecting vegetative cover). In contrast, land acquisition (including acquisition and management of conservation easements) could provide further protection for soil resources because these lands would be subject to BLM protective policies. In the event that BLM-managed lands are transferred or exchanged with other federal agencies (e.g. United States Fish and Wildlife Service [USFWS], United States Forest Service [USFS], or National Parks Service [NPS]) or the State of Alaska, soil resources would likely be managed under like protective measures.

Withdrawals – Withdrawals are formal actions that set aside, withhold, or reserve federal lands by administrative order or statute for public purposes. Withdrawals can withhold lands from uses, transfer lands between federal agencies, and dedicate lands for particular public use, but generally last only 20 years. Soil compaction on withdrawn lands could result from a variety of activities. Should BLM-managed lands be transferred or exchanged with other federal agencies (e.g., NPS, USFS, or USFWS) or the State of Alaska, soil resources would likely be managed under similar protective management principles.

Leasable, Locatable, and Salable Minerals Effects on Soils (Common to All)

General effects on soil resources are usually the result of gravel roads, exploratory drilling work camps, seismic tests, gravel pads, and the use of heavy equipment for extraction. These effects, which would result in the actual loss of soil in the direct area where said activities took place and compaction in adjacent areas, would likely be localized.

Effects on soil compaction from development and production activities are a result of gravel pits, pads, roads, dock and bridge construction, drilling rigs, pipelines, work camps, trucking, well heads, and reinjection wells. Assuming use of modern Alaska oil construction and operations practices, there would be relatively few long-term effects to soil resources. Modern operations have substantially decreased the footprint of drill pads, so now they only affect about two to four acres and the topsoil is removed and stockpiled. If held to “pool rules” (20 Alaska Administrative Code [AAC] 25.520), a maximum of four oil wells, or one gas well would be allowed per 640 acres. An oil spill or natural gas blowout may adversely affect soil in the immediate areas through contamination and the amount of compacted soil could increase the area affected. Post-production oil and gas remediation measures include the removal of structures, including drill pads, redistribution of the stockpiled topsoil over the disturbed area prior to reseeding, recontouring, and drainage control. The full magnitude of production effects is dependent upon the location, depth, size, and soil composition (ADNR 2005k).

CBNG is methane gas that is extracted from coal beds. Exploration for CBNG usually requires four to five wells, each requiring a gravel pad approximately one acre in size. Drilling mud and cuttings are typically disposed of on-site, because they do not generally contain hazardous materials. Upon completion of exploration, the drill rig, all debris and other waste material are removed from the site. While there has been some exploration, currently no development of

CBNG has occurred in Alaska. However, development scenarios predict an average of five to seven acres of soil resources would be affected per well. This includes construction and operation of the well site, support sites (i.e., field and sales compressor, gathering and sales lines), access roads, temporary roads, pump stations, injection facilities, utility lines and pipelines. Requirements to utilize existing road systems, where practicable, or vehicles that do not cause significant damage to soils, or their covering vegetation, would reduce some of these effects (ADNR 2005k).

Recreation Effects on Soils (Common to All)

Recreation use tends to be focused on road accessible areas surrounding large population centers. Soil compaction can lead to erosion, increased runoff, and potential flooding. Trail construction and use may lead to changes in soil compaction and erosion. Also, trails on ridgetops and steep slopes tended to have higher amounts of erosion (Leung and Marion 2000). Concentrated camping can lead to soil compaction and actual loss of topsoil. Long-term camping increases both the level of soil compaction as well as the size of the spatial footprint of effects on soil.

4.3.1.2.2 Alternative A for Soils

Lands and Realty Effects on Soils (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land acquisitions may have the potential to beneficially affect soil resources in these areas by providing further management protections through the development of specific implementation plans.

Withdrawals – ANCSA 17(d)(1) withdrawals would be maintained under Alternative A, maintaining current land use activity effects to soil resources.

Leasable, Locatable, and Salable Minerals Effects on Soils (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Coal, fluid, and hard rock mineral exploration and development activities may adversely affect soil as described under *Direct and Indirect Effects Common to All Alternatives*.

Mineral exploration and development may adversely affect soil through the compaction of soils by heavy equipment, which could increase runoff potential and downstream flooding, especially if mining activities occur within an aquifer recharge area. If any salable mineral extraction were to occur on BLM-managed lands, development would be highly localized in nature, resulting in minimal effects on soil resources.

Off-Highway Vehicles Effects on Soils (Alternative A)

Under Alternative A, there are no OHV designations in place within the Ring of Fire planning area, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). The use of OHVs is often detrimental to soil and leads to compaction and degradation. OHV use damages soils when the type and level of use exceed the capacity of the soil to resist effect. The capacity of a soil to resist effect varies depending on textural class, moisture level, and other environmental factors, but the processes by which soils are affected are generally the same. OHV use destroys soils through both the mechanical effect from surface traffic and the indirect effect from hydraulic modifications, soil transport, and deposition.

The level of effect from OHV use is a function of the natural resilience of the soil and the intensity of trail use. In a healthy situation, a natural balance is maintained between soils resilience and use. This leads to OHV use without soil damage. Although, on sites with wet, unstable, and sensitive soils, that natural equilibrium hangs precariously and is easily upset. Depending on the type of soil and its condition, even light levels of trail use can have environmental consequences. Once soils on trails have reached the degradation level that make it difficult for OHV use, riders often pioneer a new route across undisturbed landscape and the sequence begins anew. Depending on the amount of snow on the ground and depth of the frozen layer, these effects can occur in winter as well as summer (Meyer 2002). Within the Ring of Fire planning area, OHV use is concentrated in the Knik River Flats, much of which is subject to annual flooding and other natural forces that can help to minimize any long-term effects to soils. However, areas of high use in the Knik River Valley outside of the flats could see longer-term, moderate adverse effects to soil resources from compaction and degradation. OHV use on BLM-managed lands outside the Knik River Flats is relatively low, and adverse effects occurring year-round to soil resources are minimal.

Summary of Alternative A Effects on Soils

The management actions proposed under Alternative A would likely have generally minor effects on soil resources in the Ring of Fire planning area due to the relatively low level of current activity associated with mineral development. ANCSA 17(d)(1) withdrawals would be maintained. Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. All of the proposed actions would maintain the effects to soil resources at their present levels (with an expected gradual increase due to rises in populations). Currently OHV use is undesignated on BLM lands, effectively making all BLM lands within the planning area unrestricted to OHV use. Within the Knik River Valley, there may be localized areas of moderate adverse effects due to compaction and erosion.

4.3.1.2.3 Alternative B for Soils

Lands and Realty Effects on Soils (Alternative B)

Acquisitions – Under Alternative B, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land acquisitions may have the potential to beneficially affect soil resources in these areas by providing further management protections through the development of specific implementation plans.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative B, thereby opening up more lands for potential mineral exploration and development. However, as development potential is low for all minerals, adverse effects to soil resources would also be minimal.

Leasable, Locatable and Salable Minerals Effects on Soils (Alternative B)

All unselected lands (486,000 acres) and any selected lands (798,000 acres) whose selections are relinquished or revoked are open for fluid mineral leasing under this alternative. However, existing withdrawals other than ANCSA 17(d)(1), of approximately 798,000 acres, would remain withdrawn from fluid mineral leasing. ANCSA 17(d)(1) withdrawal orders will be revoked to allow locatable mineral entry subject to 43 CFR 3809 surface regulations for hard rock mining. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Adverse effects to soil resources from potential mineral development described above would be minimal, and localized in nature.

Off-Highway Vehicles Effects on Soils (Alternative B)

Under Alternative B all lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). BLM management actions currently do not restrict OHV use on BLM-managed lands, and it is unlikely that OHV use levels would increase over those seen considered under Alternative A. Potential long-term adverse effects on soil resources through compaction and degradation would be minimal on lands outside the Knik River Flats, and moderate on specific areas within the Knik River Flats.

Summary of Alternative B Effects on Soils

The management actions proposed under Alternative B would differ from Alternative A in that all ANCSA 17(d)(1) withdrawals would be revoked, and all lands would be designated as “open” to OHV use. Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. An increase of lands available to mineral entry could increase exploration and development activities; however, the potential for additional development is limited (Appendix G) and would be subject to ROPs and/or stipulations. Adverse effects on soil resources would be minor, and localized in nature. Effects from OHV use would be similar to those seen under Alternative A, which would be generally minor and short-term, with moderate adverse effects on soil resources seen within localized areas of the Knik River Flats.

4.3.1.2.4 Alternative C for Soils

Lands and Realty Effects on Soils (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block Special Recreation Management Area (SRMA), and the proposed Neacola Mountains Area of Critical Environmental Concern (ACEC) would both be identified as avoidance areas. Minimizing

the levels of access by development or recreational vehicles within these areas may have beneficial effects on soil resources by preventing sedimentation, rutting, and erosion.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA, the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod National Historic Trail (NHT) would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect soil resources in these areas by providing further management protections through the development of specific implementation plans.

Withdrawals – ANCSA 17(d)(1) withdrawals would be maintained under Alternative C, maintaining current land use activity effects to soil resources.

Leasable, Locatable, and Salable Minerals Effects on Soils (Alternative C)

Under Alternative C, 241,000 acres of unselected lands, and any selected lands (387,000 acres) whose selections are relinquished or revoked, are open for fluid mineral leasing. Approximately 486,000 acres of unselected lands are available for locatable and salable mineral entry. However, the following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Projected leasable mineral development would affect approximately 2,558 acres (Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations. Under Alternative C, there are also seasonal and No Surface Occupancy (NSO) constraints outlined for the Palmer Hay Flats and areas in the Cape Lieskof area of the Alaska Peninsula.

However, predicted locatable mineral development would likely affect less than 60 acres (Section 4.2.4 and Appendix G). Salable mineral development on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). In the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, soil resources should maintain their current conditions and remain protected from potential adverse effects like compaction and degradation that may occur from future mineral exploration and development. Adverse effects to soil resources from potential mineral development outside of these areas described above would be minimal, and localized in nature.

Off-Highway Vehicles Effects on Soils (Alternative C)

Lands will be designated as limited to existing roads and trails to OHV use consistent with Alaska Department of Natural Resources (ADNR) *Generally Allowed Uses on State Land*, which requires such actions as restricting use to existing trails whenever possible. The OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within the Chugach

State Park (11 AAC 20.015 and 11 AAC 20.040) would remain. Limitations on OHV use will also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. The potential adverse effects to soil from OHV use under Alternative C would likely be less than under Alternatives A or B. Limitations on OHV use in areas of current high use, such as the Knik River Flats, would show a decrease in the level of soil effects.

Recreation Effects on Soils (Alternative C)

SRMAs are designated in the Knik River and the Haines Block. An ACEC is designated in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Soil resources may receive indirect beneficial effects through the limiting of development activities.

Wild and Scenic River Effects on Soils (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs. Soil resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an impact on Outstandingly Remarkable Values (ORVs) identified for these river segments.

Summary of Alternative C Effects on Soils

The management actions proposed under Alternative C are directed towards resource conservation while continuing to allow for multiple use activities. ANCSA 17(d)(1) withdrawals would be maintained, and mineral exploration and development restrictions would be in place for specific sensitive or unique areas (Section 4.3.1.2). Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. The Knik River and Haines Block are designated as SRMAs, and the Neacola Mountains as an ACEC. Implementation plans would be developed for these areas. Under Alternative C, BLM would designate all lands as “limited” to existing roads and trails for OHV use. All of these activities would be beneficial to the soil resources located on BLM-managed lands by preventing degradation and compaction, relative to the current management actions.

The information discussed above indicates that implementation of management actions of Alternative C would result in fewer adverse effects on soil resources than under Alternatives A or B. Moreover, as a result of some management actions that would restrict land use activities in certain areas (e.g. designation of lands as SMAs), soil resources would likely benefit from implementation of Alternative C.

4.3.1.2.5 Alternative D for Soils

Lands and Realty Effects on Soils (Alternative D)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA would be identified as an avoidance area. Minimizing the levels of access by development or recreational vehicles may have beneficial effects on soil resources in this area by preventing sedimentation, rutting, and erosion.

Acquisitions – Under Alternative D, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA,

the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect soil resources in these areas by providing further management protections through the development of specific implementation plans.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative D, thereby opening up more lands for potential mineral exploration and development. However, as development potential is low for all minerals, adverse effects to soil resources would also be minimal.

Leasable, Locatable, and Salable Minerals Effects on Soils (Alternative D)

Under Alternative D, 486,000 acres of unselected lands, and any selected lands (798,000 acres) whose selections are relinquished or revoked would be open for fluid mineral leasing. Projections of leasable mineral development predict that 2,558 acres would be affected by surface disturbing activities, primarily due to predicted CBNG development occurring on split-estate land that have yet to be leased (Appendix G). Locatable mineral development projections predict less than 60 acres of surface disturbance due to a combination of land status issues and mineral potential within the Ring of Fire planning area. All mineral development would be subject to ROPs and stipulations. Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to leasable, locatable and salable mineral entry, maintaining the current conditions of soil resources in those areas.

All activities, including all mineral activities, on BLM-managed lands would be subject to ROPs and/or stipulations. Under Alternative D, there would also be seasonal and NSO constraints outlined for the Palmer Hay Flats and areas in the Cape Lieskof region of the Alaska Peninsula. However, oil and gas activities, such as road building, could still affect soils under seasonal restrictions. Coal, fluid, and hard rock mineral exploration and development activities may adversely affect soil resources as described under *Management Common to All Alternatives*. Sand and gravel mining may adversely affect soil resources as described under *Management Common to All Alternatives*, as well. However, salable mineral development on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). In the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, soil resources should maintain their current conditions and remain protected from potential adverse effects that may occur from mineral exploration and development.

Off-Highway Vehicles Effects on Soils (Alternative D)

Under Alternative D, OHV use on BLM-administered lands will be managed as described under Alternative C, including the closures at the Campbell Tract and on the BLM parcels within the Chugach State Park. Although all lands under this alternative would be designated as “limited” to existing roads and trails for OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects to soil resources relative to the current level of effects. Areas of high OHV use, such as the Knik River, may see the highest level of beneficial effects on soil resources if use is limited. Any areas that BLM chooses to open may see adverse effects to soil resources relative to current conditions.

Recreation Effects on Soils (Alternative D)

SRMAs are designated in the Knik River and the Haines Block. An ACEC is designated in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Soil resources may receive indirect beneficial effects through the limiting of OHV use or development activities.

Summary of Alternative D Effects on Soils

The management actions proposed under Alternative D are directed towards resource conservation while continuing to allow for multiple use activities. ANCSA 17(d)(1) withdrawal orders would be revoked, although restrictions would be in place for certain sensitive or unique areas. Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. The Knik River and Haines Block are designated as SRMAs, and the Neacola Mountains as an ACEC. Implementation plans would be developed for these areas. Under Alternative D, BLM would designate all lands as “limited” to OHV use. All of these activities would be beneficial to the soil resources located on BLM-managed lands, relative to the current management actions.

The information discussed above, relative to Alternative D, indicates that implementation of management actions of this alternative would result in fewer adverse effects on soil resources than under Alternatives A or B. Moreover, as a result of some management actions that would restrict land use activities in certain areas (e.g. designation of lands as SMAs), soil resources would likely benefit from implementation of Alternative D. However, this alternative would implement fewer restrictions than Alternative C, resulting in both beneficial and adverse direct and indirect effects on soil resources. ROPs and/or stipulations (Appendix D, Soils 1-12) identify measures to minimize effects on soils.

4.3.1.3 Water Resources

The potential effects to water resources under the alternatives may include changes in water quantity and drainage patterns, and degradation of water quality. The alternatives may affect surface and groundwater in isolated areas. BLM policy recognizes that many planning decisions need to consider site-specific effects that may lead to watershed-level effects. Desired ecological conditions for watersheds and water resources are described in the BLM Alaska Statewide Land Health Standards (BLM 2004u).

4.3.1.3.1 Direct and Indirect Effects Common to All Alternatives for Water Resources

Wildland Fires and Fuels Management Effects on Water Resources (Common to All)

Increased runoff from a burned area can adversely affect water quality through increased sedimentation. Flood cycles and aquatic habitat can be altered as a result of increases in water quantity from increased runoff, particularly during spring break up and storm events. Fires can also cause temporary adverse effects through increases water temperature, pH, and nutrient levels in water bodies from ash deposition (Spencer, Gabel et al. 2003).

Forestry Effects on Water Resources (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Within this plan, BLM would identify potential commercial harvest areas and high interest personal use areas. Timber harvesting has been shown to have varying degrees of adverse effects on water resources, such as increasing runoff and altering hydrologic processes (FEMAT 1993, USFS 2002a). Harvest will normally occur on no more than approximately 20 acres a year, with little road construction activity. Actions have tended to be concentrated on scattered parcels of BLM-managed lands throughout the Matanuska-Susitna Valley and the Kenai Peninsula.

It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of past timber harvests, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Given the relatively low value and limited demand for the timber in the Ring of Fire planning area, most of the timber harvested would come as an ancillary benefit from other construction projects such as ROW clearing or other permitted activities. Unless appropriately mitigated, these actions may cause sedimentation and other degradation of water quality and, especially if roads were to be built, there may be localized changes to drainage.

Hazardous Materials Effects on Water Resources (Common to All)

The management actions proposed under all alternatives for hazardous materials may have localized, beneficial effects on water quality through prevention measures and mitigation practices as sites become known.

Lands and Realty Effects on Water Resources (Common to All)

Access (ROWs) – Construction of access roads, railroads and gravel pads may have adverse effects on water quantity and drainage patterns by increasing the amount of impervious surface and decreasing the infiltration rate and capacity. However, based on the low numbers of past

ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM lands would be local in scale, and any adverse effects to water resources would not extend to the regional level.

Access (17(b) Easements – BLM will manage conservation easements and ANCSA 17(b) easements that will allow limited rights for access across private Native corporation lands. Construction of access roads or trails on ANCSA 17(b) easements may affect water resources in the local region by increasing access to public lands accessed by the easement.

Disposals and Acquisitions – Consolidating management of lands through disposals, acquisitions, and exchanges may facilitate better protection of water resources, while disposals may result in some deterioration to water.

Leasable, Locatable, and Salable Minerals Effects on Water Resources (Common to All)

Surface disturbing activities associated with mining and oil and gas activities, such as road building, resource inventories, cultural excavations, and seismic surveys, may have adverse effects to water quantity, drainage, and quality. Land clearing and grading activities necessary for construction remove vegetation and compact soils, which contributes to increased erosion and subsequent sedimentation of local surface waters. The greatest effects are likely to occur during construction, but there may be long-term effects resulting from any culverting, bridging, or road construction within a floodplain. Land-based seismic surveys are typically conducted during the winter months using truck-mounted vibrators or helicopters and snowmachines for remote operations. Seasonal timing may help minimize effects on water quality. Water quality may be degraded from small spills, improperly handled wastes and sedimentation due to eroded soils or shothole cuttings. Geophysical operations are of relatively short duration and can usually be planned and executed in a way that surface effects will be temporary. Implementation of standard policies and mitigation measures would help minimize long-term adverse effects on water resources by stabilizing soils conditions and promoting revegetation of disturbed areas.

Renewable Energy Effects on Water Resources (Common to All)

Renewable energy program sites would be evaluated on a case-by-case basis. Effects to water resources associated with renewable energy projects, such as increased levels of runoff, erosion, and sedimentation, or the diversion or redirection of waterflow from raised roadbeds, culverts, or bridges are generally smaller in magnitude and extent relative to other construction/development-related activities, and would vary for each project. Some lands have already been identified as potential energy sources within the Ring of Fire planning area; however no development activities are planned at this time (Section 3.3.9).

Off-Highway Vehicles Effects on Water Resources (Common to All)

OHVs may compact soils and adversely affect water resources in areas of high use. As soil is compacted, the structure begins to break down. Soil compaction can lead to decreased permeability and less water absorption, thereby increasing runoff potential leading to increased erosion (Sparrow, F. J. Wooding et al. 1976). OHV-generated ruts that collect and hold water can change the thermal and radiation properties of soil. Ruts and puddles can alter surface drainage, because water moving along a track causes erosion. Standing water and mud are often avoided by many OHV recreationalists, which can lead to wider and an increased number of trails. Extensive OHV use can create progressively larger ruts that further decrease soil

strength and water holding capacity (11 AAC 20.015 and 11 AAC 20.040) (Sparrow, F. J. Wooding et al. 1976; Racine and Ahlstrand 1985; Sinnott 1990). OHV use along watercourses can result in erosion, increased turbidity, and destruction of aquatic habitat (USACE 1980).

Recreation Effects on Water Resources (Common to All)

In areas of substantial recreational foot and/or vehicle traffic, potential effects on water quality can include an increase the amount of impervious surface within a watershed. Water quality may also be affected by high recreational use as these activities are generally focused around road accessible areas and generate traffic. Impervious surfaces can lead to increases in runoff potential and downstream flooding, particularly during storm events. Sensitive riparian areas, such as lakeshores and stream banks, are especially susceptible to increased tramping and soil compaction from camping, foot traffic, and vehicles. Reduced viability and rooting capacity of the riparian vegetation can in turn reduce stream bank stability and increase erosion. The effect of soil compaction is generally more severe on moist or clay-rich soils and with higher incidents of use. Discharge from two-stroke snowmachine engines can lead to pollutant deposition on snow, and wash into surface and groundwater (USFS 2002a). With the exception of the Knik River Flats, recreation activities on BLM-managed lands within the Ring of Fire planning area are relatively dispersed, and adverse effects on water quality are minimal and short-term in nature.

4.3.1.3.2 Alternative A for Water Resources

Lands and Realty Effects on Water Resources (Alternative A)

Access – Based on the low numbers of past ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM-managed lands would have effects on water resources that were local in scale, and were minimal and short-term in nature.

Withdrawals – No withdrawal review would occur under this alternative, and all existing withdrawals would stay in place. Because of the constraints in place under these withdrawals, there would be no increase in mineral resource exploration and development activities, and potential adverse effects on water quality.

Leasable, Locatable, and Salable Minerals Effects on Water Resources (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*, however the magnitude of potential adverse effects on water quality would be minor due to the fragmented nature of BLM-managed lands within the planning area and mineral development potential.

Off-Highway Vehicles Effects on Water Resources (Alternative A)

Under Alternative A, there are no OHV designations in place within the Ring of Fire planning area, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). As currently managed, OHV use is allowed on all terrain. OHV use may cause some minor, localized adverse effects on water quantity and quality through soil compaction, increased levels of erosion and sedimentation, or the alteration of surface drainage patterns across scattered parcels throughout the planning area. Within the Ring of Fire planning area, OHV use is concentrated within the Knik River Flats, much of which is subject to flooding, high sediment loads, and other natural forces. OHV use may adversely affect water quality as a result of fuel leaks, chemical spills, and increased littering. Clear water streams that are adjacent to, or feeding into the Knik River may be moderately affected by current OHV use. OHV use on BLM-managed lands outside the Knik River Flats is relatively low, and adverse effects on water resources are minimal.

Summary of Alternative A Effects on Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands where there is existing mineral development and intensive OHV use. Forestry activity, of less than 20 acres per year, may cause sedimentation and other degradation of water quality, unless appropriately mitigated by setbacks from water bodies. Any possible effects from hazardous materials, renewable energy, and recreation would be minimal, and would likely not extend to the regional level. Mining, oil and gas, and associated road development would likely be limited in extent given the low potential for mineral development; therefore, potential adverse effects on water resources would be minor. Adverse effects may result from locatable and salable material mining, if any such mining is undertaken however, these effects would likely only occur on less than one percent of lands within the Ring of Fire planning area. As OHV use remains unrestricted, some short-term adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality may continue in heavy use areas, such as the Knik River Flats clear water streams.

4.3.1.3.3 Alternative B for Water Resources

Lands and Realty Effects on Water Resources (Alternative B)

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for disposal. Because of the constraints on surface disturbing activities such as mineral development in place under these withdrawals, there would be an increased potential for resource exploration and development. Potential adverse effects on water resources discussed under *Alternative A – Leasable, Locatable and Salable Minerals*, would be similar under this alternative.

Leasable, Locatable, and Salable Minerals Effects on Water Resources (Alternative B)

Under this alternative, some increase in localized adverse effects to water resources may occur, as additional lands are made available for mineral exploration and development. Approximately 486,000 acres of unselected lands, and any selected lands (798,000 acres) where selections

have been relinquished, would be open for mineral leasing. However the RFDs (Appendix G) for oil and gas development, predict a total of 2,558 acres of projected exploration and development. Up to 60 acres of surface disturbance is predicted through the development of locatable minerals. It is unlikely that any salable mineral extraction would occur on BLM-managed lands. All such development would be subject to ROPs and project-specific mitigation measures and, in the case of oil and gas development, stipulations. Such disturbance may result in long-term effects to water resources through impoundments and degradation of water quality through sedimentation and spills. Development on BLM-managed lands would be limited in scope, and effect a localized portion of the Ring of Fire planning area.

Off-Highway Vehicles Effects on Water Resources (Alternative B)

All lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Because there are currently no OHV designations on BLM-managed lands within the Ring of Fire, use occurs over all types of terrain. Therefore, the potential adverse effects under this alternative would be the same as described under Alternative A, although the management decision to allow unrestricted OHV use on all lands may increase the duration and/or magnitude of adverse effects on water resources, especially in areas of high use such as the Knik River valley clear water streams.

Summary of Alternative B Effects on Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands along the road network, areas with existing mineral development activity or higher mineral potential, and in areas of concentrated OHV use. Effects from forestry, ROWs, mining, and oil and gas would likely be limited in extent; consequently only a small portion of the waters that occur in BLM-managed lands may be affected. OHV use would be designated as open, contributing to short-term adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality in heavy use areas, such as the Knik River valley clear water streams. Overall, effects to water resources under Alternative B would mainly occur on a local scale.

4.3.1.3.4 Alternative C for Water Resources

Lands and Realty Effects on Water Resources (Alternative C)

Access (ROWs) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Minimizing the levels of access for development or recreation vehicles would help to maintain the current condition of water resources through the prevention of road building.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect water resources in these areas by providing further management protections through the development of specific implementation plans.

Leasable, Locatable, and Salable Minerals Effects on Water Resources (Alternative C)

Under Alternative C, 241,000 acres of unselected lands, and 387,000 acres of selected lands would be open to leasable entry. However, the level of projected mineral development, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Approximately 2,558 acres of surface disturbance would occur. Locatable mineral development would occur on less than 60 acres, and salable mineral development is unlikely in BLM-managed lands. Projected mineral development would be limited in extent due to land status issues and mineral potential within the Ring of Fire planning area. All mineral development would be subject to ROPs and stipulations (Section 4.2.4 and Appendix G).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on surface water sources and recharge areas. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figured 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

All activities, including all mineral activities, on BLM-managed lands would be subject to ROPs and stipulations. Under Alternative C, there are also seasonal and NSO constraints outlined for the Palmer Hay Flats (Figure 2.3-5) and areas in the Cape Lieskof area (Figure 2.3-9) of the Alaska Peninsula. However, in the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints (e.g., NSO within 200 ft of anadromous streams and rivers), water resources should maintain their current conditions.

Off-Highway Vehicles Effects on Water Resources (Alternative C)

Lands would be designated as limited to existing roads and trails for OHV use consistent with ADNR's *Generally Allowed Uses on State Land*, which require such actions as restricting use to existing trails whenever possible. The OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040) would remain. Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to water resources relative to the current level of effects, particularly in areas of high OHV use, such as the Knik River Flats.

Recreation Effects on Water Resources (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is designated in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Water resources may indirectly benefit through potential limitations on development activities.

Wild and Scenic Rivers Effects on Water Resources (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Water resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an impact on Outstandingly Remarkable Values (ORVs) identified for these river segments.

Summary of Alternative C Effects on Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative C are likely to be limited in scale, and concentrated in specific areas. Effects on water resources from forestry (approximately 20 acres per year), establishment of ROWs, mining, and oil and gas (up to 2,618 acres total) would be minor, due to avoidance areas, low potential for mineral development, and retention of ANCSA 17(d)(1) withdrawals. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. Some management actions, such as establishment of SMAs may restrict land use activities within these specific areas, and allow for the protection and recovery of any previously affected water resources. Thus while Alternative C may result in as many, or nearly as many effects to water from development activities (fluid mineral, locatable mineral, salable mineral, and forestry) as Alternative B, limitations on OHV use in some areas could reduce effects to water resources generally (especially to Knik River tributaries).

4.3.1.3.5 Alternative D for Water Resources

Lands and Realty Effects on Water Resources (Alternative D)

Access (ROWs) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4) would be identified as an avoidance area. Minimizing the levels of access by development or recreational vehicles may have beneficial effects on water resources in this area by preventing sedimentation, rutting, and erosion.

Acquisitions – Under Alternative D, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect water resources in these areas by providing further management protections through the development of specific implementation plans.

Withdrawals – No withdrawal review would occur under this alternative, and all existing withdrawals would stay in place. Because of the constraints in place under these withdrawals, there would be no increase in mineral resource exploration and development activities, and potential adverse effects on water quality.

Leasable, Locatable, and Salable Minerals Effects on Water Resources (Alternative D)

Under Alternative D, 486,000 acres of unselected lands, and 798,000 acres of selected lands would be open to leasable minerals. However, the projected level of development, and overall effects from leasable, locatable, and salable minerals would be similar to that in Alternative B. Projected mineral development would be limited in extent due to a combination of land status issues and mineral potential within the Ring of Fire planning area (Appendix G), thereby maintaining current water resource conditions throughout the Ring of Fire planning area. Similar to Alternative C, the Lake Carlanna Municipal Watershed (Figure 2.3-2) and the Halibut Cove Forest Study Area (Figure 2.3-1) would be closed to potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of water resources in those areas. All mineral development would be subject to ROPs and stipulations.

Off-Highway Vehicles Effects on Water Resources (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C, including the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects to water resources relative to the current level of effects. Areas of high OHV use, such as the Knik River SRMA, would experience beneficial effects on water resources if use is limited.

Recreation Effects on Water Resources (Alternative D)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is designated in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Water resources may indirectly benefit through establishing limits on development activities.

Summary of Alternative D Effects on Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative D are likely to be limited in scale, concentrated in specific areas, and minor in magnitude. Opening additional lands to mineral entry through revocation of ANCSA 17(d)(1) withdrawals could increase exploration activities; however the potential for additional development is low, and would be subject to ROPs and stipulations (Appendix D, Water 1-24). Potential effects from these actions would be minor. Effects from forestry (approximately 20 acres per year on BLM-managed lands), and the establishment of ROWs would likely be limited in extent; consequently only a small portion of the waters that occur in BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. The establishment of three SMAs may restrict land use activities within these specific areas, potentially benefiting water resources. Thus, while Alternative D may

result in a similar level of effects to water from development activities (fluid mineral, locatable mineral, salable mineral, and forestry) as Alternative B, limitations on OHV use in some areas could reduce effects to water generally (and especially to Knik River tributaries) and establishment of SMAs could protect and allow for recovery of previously affected water resources. The establishment of SMAs and restrictions on OHV use, leasable, locatable and salable mineral development would provide further protection and allow for recovery of previously affected water resources to a greater extent than Alternatives A or B.

4.3.1.4 Fisheries and Aquatic Habitat

4.3.1.4.1 Direct and Indirect Effects Common to All Alternatives for Fisheries and Aquatic Habitat

Wildlife Effects on Fisheries and Aquatic Habitat (Common to All)

Wildlife management under all alternatives would continue to support the efforts of the National Marine Fisheries Service (NMFS) and the USFWS to identify and designate critical habitat for all Threatened and Endangered (T&E) species across the Ring of Fire planning area. Designations of such habitat would consequently benefit fish habitat through the protections allotted from designations, which restrict certain uses of the land or water, and may therefore help protect fish habitat from alteration or contamination. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, it is dependent upon the purpose and function of the critical habitat, and the action resulting in adverse destruction or modification to that habitat (FEMAT 1993).

Lands and Realty Effects on Fisheries and Aquatic Habitat (Common to All)

Access (ROWs) – ROW grants and easements may promote the construction of paved or unpaved access roads, gravel pads, or railways, all of which may adversely affect fish habitat through runoff that may introduce contaminants into the water. However, based on the low numbers of past ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM lands would be local in scale, and any adverse effects to fish resources would not extend to the regional level.

Disposals and Acquisitions – Disposal of BLM lands results in transfer of the land to the State of Alaska, Native corporations, individuals, local governments, etc. Potential land acquisition may beneficially affect any fish resources associated with these parcels by providing management under BLM's protective policies. Should BLM-managed lands be transferred to other federal agencies (e.g., NPS, USFS, or USFWS) management, fish resources would likely be managed under similar protective measures.

Hazardous Materials Effects on Fisheries and Aquatic Habitat (Common to All)

The BLM management actions under all alternatives for hazardous materials may have localized, beneficial effects on fish habitat through prevention measures, and mitigation practices, as sites become known.

Leasable, Locatable, and Salable Minerals Effects on Fisheries and Aquatic Habitat (Common to All)

Mining and oil and gas leasing could have adverse effects on fish habitat. If roads, pads, and/or culverts were authorized through ROWs associated with development on non-BLM-managed lands, or in association with mining or oil and gas leasing, flow patterns of nearby streams and sedimentation levels through runoff could be altered. Fish may be injured by human activities, vehicular injury, exposure to contaminants, loss or degradation of habitat, or unauthorized takings. Accidental releases of petroleum hydrocarbons (oil and gas, produced water) and drilling fluids could contaminate nearby streams, thereby degrading fish habitat and possibly

causing mortality of fish, although these actions may be mitigated through permit stipulations and planning efforts.

Mining for gold and other hard rock materials has the potential to result in accidental discharges of chemical solutions (acids) and heavy metals into nearby waterways. Contamination of fish habitat can result in the mortality of fish (poisoning), as well as degradation of their habitat (through sedimentation). Disturbance of the soil surface (i.e., vegetation removal, compaction of soil) during such mining also promotes sedimentation into waterways through erosion. Placer mining for gold and other locatables has the greatest potential for effects on fish habitat.

Renewable Energy Effects on Fisheries and Aquatic Habitat (Common to All)

Renewable energy program sites would be evaluated on a case-by-case basis. Some lands have already been identified as potential energy sources within the Ring of Fire planning area; however no development activities are planned at this time (Section 3.3.9). Effects from renewable energy programs on fish habitat may include runoff due to the presence of access roads and other structures, which may carry petroleum hydrocarbons as well as sediment.

Off-Highway Vehicles Effects on Fisheries and Aquatic Habitat (Common to All)

It has been documented in Alaska that multiple stream crossings by OHVs can cause alterations of the stream bank's structure (exposed soil, denuded vegetation) and function (as rearing habitat), and may cause the introduction of sediment into the waterway (Weidmer 2002). More extensive adverse effects may occur to fish habitat located in areas of high OHV use, such as the Knik River drainage.

Recreation Effects on Fisheries and Aquatic Habitat (Common to All)

Recreation on BLM-managed lands, separate from OHV use, can affect fish habitat mainly through foot traffic on stream banks (from hiking or fishing), which can lead to erosion and sedimentation of fish habitat. When the riparian vegetation has been trampled due to overuse, or absence of defined pathways, the stream banks lose structure, which leads to erosion. Erosion adversely affects fish habitat by reducing the water quality. In general, as use levels increase in an area, recreational pollutants such as soaps, fuels, and herbicides also increase.

4.3.1.4.2 Alternative A for Fisheries and Aquatic Habitat

Lands and Realty Effects on Fisheries and Aquatic Habitat (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Easements providing access to BLM or State lands are managed by BLM. Easements provide access to lands managed by the NPS, USFS, or USFWS, and once lands are conveyed, the easement is managed by the respective agency. Any fish or fish habitat associated with these easements would likely be maintained, resulting in beneficial effects.

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. The potential for effects on fish habitat from ROW and road development is low.

Leasable, Locatable, and Salable Minerals Effects on Fisheries and Aquatic Habitat (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. However, salable mineral development on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). The development of locatable minerals (likely less than 60 acres) may cause localized adverse effects on fish habitat from projected exploration, development, and production. Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*.

Off-Highway Vehicles Effects on Fisheries and Aquatic Habitat (Alternative A)

Under Alternative A, there are no OHV use designations within the Ring of Fire planning area, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Potential adverse effects to fish habitat from OHV use are low, except in the Knik River Flats, where effects may be moderate for specific streams that are in high use areas.

Summary of Alternative A Effects on Fisheries and Aquatic Habitat

Effects on fish habitat from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands. Areas with potential for mineral development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, making potential effects on fish and fish habitat minimal, and localized in scale. General adverse recreation effects would be localized and minimal. Acquisition of land from willing landowners, particularly when they are located along riparian areas, can have a beneficial effect on fish habitat by preventing development of private land and providing consistent habitat management. The unrestricted OHV use, especially in high-use areas such as the Knik River valley, may cause changes in stream morphology and increased levels of pollution. Overall, minimal adverse effects to fish habitat under Alternative A may occur on a local scale.

4.3.1.4.3 Alternative B for Fisheries and Aquatic Habitat

Lands and Realty Effects on Fisheries and Aquatic Habitat (Alternative B)

Acquisitions and Access – Acquisitions and access decisions that may affect fish habitat under Alternative B are the same as discussed under Alternative A and in general would be minimal.

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for leasing and disposal. Because of the constraints currently in place under these withdrawals, the revocation of the withdrawals could increase potential resource development, and potential fish habitat-disturbing activities. However, given the low development potential for minerals, effects on fish and fish habitat would be localized and minor.

Leasable, Locatable, and Salable Minerals Effects on Fisheries and Aquatic Habitat (Alternative B)

Under this alternative, approximately 486,000 acres of unselected lands and any selected lands (798,000 acres) whose selections have been revoked or relinquished would be open to leasable minerals. Localized adverse effects such as degradation of fish habitat may occur (described in *Direct and Indirect Effects Common to All Alternatives*), but, similar to Alternative A, projected mineral development would be limited in extent due to a combination of land status issues and mineral potential within the Ring of Fire planning area (Appendix G). Approximately 2,558 acres of surface disturbance would occur. Locatable mineral development would occur on less than 60 acres, and salable mineral development is unlikely on BLM-managed lands. All mineral development would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D).

Off-Highway Vehicles Effects on Fisheries and Aquatic Habitat (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Potential effects on fish and fish habitat would be similar to Alternative A, minor throughout most of the planning area, but moderate in specific streams within the Knik River drainage that have high levels of OHV traffic.

Summary of Alternative B Effects on Fisheries and Aquatic Habitat

Effects on fish habitat from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and would be similar to Alternative A. With the relinquishment of ANCSA 17(d)(1) withdrawals, mineral exploration could increase. However, areas with potential for mineral development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, and potential effects on fish and fish habitat would be minor. Timber harvests would continue at approximately 20 acres per year. General adverse recreation effects would be minimal and localized. Acquisitions, particularly when they occur along riparian areas, can have a beneficial effect on fish habitat by preventing development of private land and providing consistent habitat management. Designating the entire planning area as “open” to OHV use may continue to cause changes in stream morphology and increased levels of pollution in high use areas such as the Knik River drainage. Overall, minimal adverse effects to fish habitat under Alternative B may occur on a local scale.

4.3.1.4.4 Alternative C for Fisheries and Aquatic Habitat

Lands and Realty Effects on Fisheries and Aquatic Habitat (Alternative C)

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA (Figure 2.3-4), the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect fish habitat in these areas by providing further management protections through the development of specific implementation plans.

Leasable, Locatable, and Salable Minerals Effects on Fisheries and Aquatic Habitat (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. The ANCSA 17(d)(1) withdrawals would remain in place and potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on fisheries and aquatic habitats. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Under Alternative C, there are seasonal and NSO constraints outlined for the Palmer Hay Flats (Figure 2.3-5) and areas in the Cape Lieskof area (Figure 2.3-9) of the Alaska Peninsula. However, in the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, fish habitats should maintain their current conditions.

Off-Highway Vehicles Effects on Fisheries and Aquatic Habitat (Alternative C)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures at the Campbell Tract and on BLM parcels within Chugach State Park would remain. Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to fish habitat relative to the current level of effects. Subsequent planning activities for the Knik River SRMA could result in beneficial effects on fish habitat from a potential decrease in erosion and sedimentation.

Recreation Effects on Fisheries and Aquatic Habitat (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is designated in the Neacola Mountains. Fish habitat may receive indirect beneficial effects through increased management guidance and the limiting of development activities through the development of implementation plans in these areas.

Wild and Scenic Rivers Effects on Fisheries and Aquatic Habitat (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Fisheries and aquatic habitat within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Fisheries and Aquatic Habitat

Effects on fish habitat from future management under Alternative C would be similar to Alternative A, and are likely to be limited in scale, or concentrated in specific areas. Effects from forestry (approximately 20 acres per year), ROWs, and mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) would likely be minor due to the avoidance areas identified under this alternative, low potential for mineral development, and retention of ANCSA 17(d)(1) withdrawals. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects on fish habitat through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection of fish habitat, resulting in a beneficial effect.

4.3.1.4.5 Alternative D for Fisheries and Aquatic Habitat

Lands and Realty Effects on Fisheries and Aquatic Habitat (Alternative D)

Acquisitions and Access – Acquisitions and access issues that may affect fish habitat under Alternative D are the same as discussed under Alternative C, except the Neacola Mountains ACEC (Figure 2.3-3) would not be identified as an avoidance area.

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for disposal. Because of the constraints in place under these withdrawals, there would be an increased potential for resource development and potential fish habitat disturbing activities.

Leasable, Locatable, and Salable Minerals Effects on Fisheries and Aquatic Habitat (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Similar to Alternative C, the Lake Carlanna Municipal Watershed (Figure 2.3-2) and the Halibut Cove Forest Study Area (Figure 2.3-1) would be closed to any potential leasable, locatable and salable mineral entry, which would maintain the current conditions of any fish or fish habitat in those areas. Any development would be subject to ROPs and stipulations (Appendix D).

Off-Highway Vehicles Effects on Fisheries and Aquatic Habitat (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040) would remain. Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects on fish habitat relative to the current level of effects. Areas of high OHV use, such as the Knik River SRMA (Figure 2.3-5), would experience beneficial effects on fish habitat, through decreases in erosion and sedimentation, if use were limited.

Recreation Effects on Fisheries and Aquatic Habitat (Alternative D)

Effects from recreation on fish habitat under Alternative D are the same as discussed under Alternative C.

Summary of Alternative D Effects on Fisheries and Aquatic Habitat

Effects on fish habitat from future management under Alternative D are likely to be limited in scale, concentrated in specific areas, and minor in magnitude. Opening additional lands to mineral entry could increase exploration activities; however the potential for additional development is low and represents less than one percent of BLM-managed lands within the planning area. Effects from forestry (approximately 20 acres per year on BLM-managed lands), ROWs, mineral development (up to 2,618 acres total) would likely be limited; consequently only small portions of BLM-managed lands may see minor effects to fish habitat. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects on fish habitat through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. The establishment of SMAs may restrict land use activities within these specific areas, potentially benefiting fish and fish habitat. ROPs and/or stipulations (Appendix D, FWH 1-14 and Water 1-24) identify measures to minimize effects on fisheries and aquatic habitat.

4.3.1.5 Wildlife

4.3.1.5.1 Direct and Indirect Effects Common to All Alternatives for Wildlife

All of the alternatives share a common objective to manage wildlife habitat to meet the goals of BLM's National Fish and Wildlife initiatives, ADF&G management plans (consistent with the Master Memorandum of Understanding [MOU] between BLM and ADF&G), federal subsistence mandates, and BLM Alaska Statewide Land Health Standards. These include:

- Ensure an abundance and diversity of habitat to support ADF&G population goals;
- Maintain, enhance, restore, and mitigate effects to big game and upland game habitat to sustain or increase populations and user opportunities;
- Perpetuate a diversity and abundance of waterfowl and wetland habitat;
- Provide suitable habitat for birds of prey; and
- Manage riparian areas to achieve a healthy and productive condition.

There are also specific management objectives for BLM sensitive species that are common to all alternatives:

- Manage habitats to maintain populations at levels that will avoid, to the extent practicable, negative effects to the species and eliminate the need to list the species as T&E by State or federal agencies.
- Inventory and monitor BLM-managed lands to determine the status and distribution of sensitive species and their habitats. Establish monitoring priorities that track population trends and habitat conditions.
- Protect, maintain, enhance, restore and mitigate effects to habitats that are critical for sensitive species, including closures and mitigation measures.
- Promote, participate in, and direct appropriate research, recovery plan implementation, and interagency cooperative monitoring efforts to adequately address conservation of sensitive species within the project area.

The majority of BLM-administered lands in the Ring of Fire planning area has been selected by Native corporations or the State and has not been subject to site-specific wildlife surveys or habitat evaluations. Most of the sensitive species that occur in these areas are closely associated with nearshore marine environments and wetland habitats (e.g., waterfowl, shorebirds, murrelets, and harbor seals), but there are some species that inhabit upland areas (e.g., songbirds and lynx). Most of the BLM lands are remote parcels that have little potential for road building, resource extraction industries, or other land-use activities that would cause wildlife habitat loss. Transportation and utility ROWs across BLM lands are typically used for OHV trails and narrow gravel roads that do not receive substantial amounts of traffic or pose challenges for wildlife to cross.

Some of the sensitive waterfowl species are subject to limited subsistence hunting by Alaska Natives. These populations are monitored by the USFWS and spring and summer migratory waterfowl harvests are managed under legislation implementing the Migratory Bird Treaty Act Amendments. BLM is not involved in decisions regarding hunting or trapping regulations and therefore has no direct role in mortality rates of game species. BLM is involved indirectly in allowing access across its lands, but these transportation requests and historical trails serve a

multitude of purposes in addition to access for hunting. The wildlife management objectives listed above include several that would decrease mortality and increase reproductive potentials of various species through habitat management and are thus considered beneficial to wildlife.

Activities on BLM administered lands that require permits are reviewed for consistency with applicable wildlife conservation laws such as the Bald Eagle Protection Act, Migratory Bird Treaty Act, Marine Mammal Protection Act, and others during the permitting process. Actions that do not require a permit or for which permits have not been pursued for some reason may or may not come to the attention of BLM staff. The extent of potential problems on many remote parcels is unknown but the policy is to be consistent with all wildlife laws during the permitting process. This policy and situation is the same for all regions in the Ring of Fire planning area and will not be discussed further.

Special Status Species

The majority of BLM-administered lands in the Ring of Fire planning area that are within, or near critical habitats for Steller sea lions and Steller's eiders, have been selected by Native corporations or the State of Alaska. However, the exact location of these various small parcels in relation to important habitat boundaries is poorly known. Most of the BLM lands along the coasts where these key habitats are located are remote parcels that have little potential for road building, resource extraction industries, or other land-use activities that could cause substantial alterations of the habitat. Under all the alternatives, areas that have nearby population centers, transportation/utility corridors, and proposed resource extraction developments are likely to receive high priority for investigations and/or coordination with other resource agencies to minimize potential effects on T&E species and their habitats.

Some special status species are subject to subsistence hunts by Alaska Natives (e.g., Steller sea lions and Cook Inlet belugas), but the numbers killed each year are managed under the terms of the Marine Mammal Protection Act, and the Endangered Species Act (ESA), which provide exemptions for certain qualifying Alaska Native subsistence harvests. Access of subsistence hunters is generally by boats from established villages so land-use decisions by BLM are unlikely to affect access for hunters or have indirect effects on mortality. Because many marine species are susceptible to oil pollution in the water, any activities on BLM lands that have the potential for accidental release of oil or other harmful materials into the marine environment should receive careful scrutiny for prevention and mitigation measures during the permitting process under all alternatives. These measures would protect T&E species from potential mortality as well as decreased reproductive rates. Other protective measures for T&E species and their habitats would also be considered under all alternatives during the permitting process for other types of proposed activities on BLM lands such as mining and road building.

BLM is required by law and by its own policies to cooperate and coordinate with the USFWS and NMFS to develop and implement appropriate conservation measures for T&E species on BLM lands. This applies to all the alternatives and all regions of the Ring of Fire planning area. Although there may be potentially adverse activities on remote parcels that do not come to the attention of BLM staff, the policy common to all alternatives is to be consistent with the ESA during the planning and permitting processes.

Critical habitats for Steller sea lions and Steller's eiders have been established, and critical habitat for other listed species have been designated by the USFWS and NMFS. Recovery plans have been established for Steller sea lions in conjunction with NMFS and for Steller's

iders in conjunction with USFWS. BLM has not undertaken any specific monitoring or surveys for T&E species on its lands.

The Alaska Peninsula/Aleutian Chain region includes a great amount of Steller sea lion critical habitat, and many of the Steller's eider critical habitats. In addition, if the USFWS designates any critical habitat in the future for the southwestern Distinct Population Segment (DPS) of sea otters, it would most likely be in this region. The issue of retaining federal ownership of designated critical habitat will therefore be especially important in this region. In the other three regions, the only species with designated critical habitat is Steller sea lions.

Forestry Effects on Wildlife (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads be constructed to access parcels of timber in the future, which could affect wildlife movement throughout the area.

Lands and Realty Effects on Wildlife (Common to All)

Disposals and Acquisitions – In an effort to ensure protection of special status species and critical habitat, BLM is required to develop, to the extent practicable, inventory programs that document the occurrence, distribution, population, dynamics, and habitat conditions of all listed species on lands administered by BLM, and evaluate the significance of lands administered by BLM in the conservation of those species (6840.06A1a) (BLM 2001b). Should ESA-listed species be located on unselected BLM-managed lands, the lands are required to remain in federal ownership (6840.06A4) (BLM 2001b). Should BLM-managed lands be transferred to other federal agencies (e.g., NPS, USFS, or USFWS) management, wildlife and wildlife habitat would likely be managed under similar protective measures.

Leasable, Locatable, and Salable Minerals Effects on Wildlife (Common to All)

Mining and oil and gas leasing could have adverse effects on wildlife species and important habitat. If roads were authorized through ROWs associated with development on non-BLM-managed lands, or in association with mining or oil and gas leasing, there could be localized effects to migratory patterns or habitat. Direct habitat loss may also lead to wildlife displacement and habitat fragmentation. Surface disturbing activities may displace animals into lower quality habitat and increase competition for available resources with other species uses. The greatest effects are likely to occur during construction, but there could be long-term effects resulting from any bridging or road construction that may cause permanent loss or alteration of wildlife habitat and disruption of migratory patterns.

4.3.1.5.2 Alternative A for Wildlife

Under the current management system, Alternative A, compliance, monitoring, and mitigation requirements for wildlife are determined on a case-by-case basis during the permitting process.

Lands and Realty Effects on Wildlife (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Where conservation easements are purchased or managed, development should be limited to existing improvements, which could have a status quo effect on wildlife habitat. Where 17(b) easements are transferred to the NPS, USFS, or USFWS, the condition of wildlife populations and habitat associated with these easements would likely be maintained.

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. Based on the low numbers of past ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM lands would be local in scale, and effects to wildlife species would be minor. New access routes could create new entry points for hunters into areas previously not as accessible.

Access (17(b) Easements) – BLM will manage conservation easements and ANCSA 17(b) easements that will allow limited rights for access across private native corporation lands. Construction of access roads or trails on ANCSA 17(b) easements may affect wildlife in the local region by increasing access to public lands accessed by the easement. Where 17(b) easements are transferred to the NPS, USFS, or USFWS, the condition of wildlife populations and habitat associated with these easements would likely be maintained.

Leasable, Locatable, and Salable Minerals Effects on Wildlife (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands in the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands, within the Ring of Fire planning area are available for sale of mineral materials. Projected locatable mineral development (less than 60 acres) may cause localized adverse effects on wildlife from projected exploration, development, and production. Salable mineral development on BLM-managed lands is unlikely (Appendix G). The likelihood of effects occurring to wildlife would be low given the limited potential for mineral development on BLM-managed lands.

Off-Highway Vehicles Effects on Wildlife (Alternative A)

Under Alternative A, no OHV designations are in place, or are planned for the Ring of Fire planning area, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. As currently managed, OHV use is allowed on all terrain, including through areas that could support special status species. Potential adverse effects to wildlife from OHV use would be minor, except in the Knik River Flats, where effects may be moderate for specific areas of high OHV traffic and important wildlife habitat.

Recreation Effects on Wildlife (Alternative A)

There are currently no SMAs within the Ring of Fire planning area that would affect wildlife habitat or populations. Commercial helicopter tourism activities in the Haines Block would continue to require conditions and stipulations on permits and plans of operations to minimize potential adverse effects on mountain goat populations.

Summary of Alternative A Effects on Wildlife

The management actions proposed under the various management categories of Alternative A would maintain the effects to the wildlife resources at their current levels. Areas with potential for mineral development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, and potential effects on wildlife and wildlife habitat would be minor. However, as OHV use remains unrestricted, moderate adverse effects to BLM-managed habitat, through loss of habitat and disturbance, could continue in high use areas such as the Knik River Flats. Minimal forestry activity (approximately 20 acres per year) and recreational activities along the road system may cause minor adverse effects to wildlife, but on an extremely local scale.

4.3.1.5.3 Alternative B for Wildlife

Lands and Realty Effects on Wildlife (Alternative B)

Acquisitions and Access – Acquisitions and access decisions that may affect wildlife under Alternative B are the same as discussed under Alternative A.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native Corporation would then be available for consideration of disposal. Because of the constraints currently in place under these withdrawals, rejection of the withdrawals could increase potential resource development and wildlife and habitat disturbing activities. Given the limited potential for mineral development, effects on wildlife and habitat would be localized and minor.

Leasables, Locatables, and Salables Effects on Wildlife (Alternative B)

Under this alternative, localized adverse effects to wildlife species and habitats may occur (described in *Management Common to All*). Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Off-Highway Vehicles Effects on Wildlife (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open”, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. Because OHV use on BLM-managed lands is currently unrestricted, this management action would have similar effects as Alternative A. Potential effects on wildlife and habitat would be minor throughout most of the planning area, but would be moderate in specific areas within the Knik River drainage.

Recreation Effects on Wildlife (Alternative B)

Under Alternative B, commercial helicopter tourism activities in the Haines Block that have potential adverse effects on mountain goats in the area would continue to require conditions and stipulations on permits and plans of operations.

Summary of Alternative B Effects on Wildlife (Alternative B)

The management actions proposed under the various management categories of Alternative B would maintain the effects to the wildlife resources at their current levels. Designating all lands as “open” to OHV use may continue adverse effects to BLM-managed habitat in high use areas such as the Knik River drainage, through loss of habitat and disturbance. Boundaries of BLM-managed lands in relation to critical habitats should receive careful scrutiny before land transfers are approved. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to wildlife, but on an extremely local scale. With the revocation of ANCSA 17(d)(1) withdrawals, mineral exploration could increase; however areas that could be disturbed through mineral development represent less than one percent (2,618 acres) of BLM-managed lands within the Ring of Fire planning area. Potential effects on wildlife and habitat would be minor. Only a small portion of the wildlife species found on BLM-managed lands could be adversely affected through loss of habitat and disturbance

4.3.1.5.4 Alternative C for Wildlife

Lands and Realty Effects on Wildlife (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Sensitive mountain goat populations within the proposed SRMA would be beneficially affected by this action.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect vegetation in these areas by providing further management protections through the development of specific implementation plans, particularly in the Haines Block SRMA where there are sensitive mountain goat populations.

Leasables, Locatables, and Salables Effects on Wildlife (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on wildlife habitats. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)

- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Under Alternative C, there are also seasonal constraints outlined for the Palmer Hay Flats (Figure 2.3-5) to protect habitat for migratory birds, and NSO areas in the Cape Lieskof area of the Alaska Peninsula (Figure 2.3-9) to protect onshore habitat of marine mammals, wintering waterfowl, northern sea otters, and crucial brown bear habitat. Actions taken in these areas, and in the areas listed above, would afford additional habitat protections to wildlife species.

Off-Highway Vehicles Effects on Wildlife (Alternative C)

Lands would be designated as “limited” to OHV use consistent with ADNR’s *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to wildlife relative to the current level of effects. Areas of important or sensitive wildlife populations, such as the Haines Block SRMA, or high use areas such as the Knik River SRMA could result in beneficial effects on recovering wildlife populations and/or habitats due to subsequent planning activities.

Recreation Effects on Wildlife (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. The two proposed SRMAs, primarily the Haines Block, would be managed to avoid adverse effects on wildlife resources. The development of these implementation plans would help wildlife managers provide useful and effective information about wildlife habitat needs in the land-use decision-making process. This would be considered beneficial for wildlife resources in these specific areas. None of these three SMAs have designated critical habitat for T&E species.

Wild and Scenic River Effects on Wildlife (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs. Wildlife resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Wildlife

Effects to wildlife from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects on wildlife, but on an extremely local scale. Any mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres), so consequently only a small portion of the wildlife species found on BLM-managed lands could be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation or habitat. Management actions, such as the

establishment of SMAs, may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wildlife species or habitats, resulting in beneficial effects. The two SRMAs, primarily the Haines Block, would be managed to avoid adverse effects on wildlife resources.

4.3.1.5.5 Alternative D for Wildlife

Lands and Realty Effects on Wildlife (Alternative D)

Acquisitions that may affect wildlife under Alternative D are the same as discussed under Alternative C, except the Neacola Mountains ACEC would not be identified as an avoidance area.

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for disposal. Because of the constraints in place under these withdrawals, there would be an increased potential for resource development and potential wildlife population or habitat disturbing activities.

Leasable, Locatable, and Salable Minerals Effects on Wildlife (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of wildlife resources in those areas.

Off-Highway Vehicles Effects on Wildlife (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, Integrated Implementation Plans (IAP) may further modify the “limited” designation to include some open subareas for more intensive use. Limiting use within the Ring of Fire planning area may reduce adverse effects to wildlife relative to the current level of effects. Areas of high OHV use, such as the Knik River SRMA, may experience the highest level of beneficial effects on wildlife if use is limited to existing roads and trails.

Recreation Effects on Wildlife (Alternative D)

Effects from recreation on wildlife under Alternative D are the same as discussed under Alternative C and in general, due to further levels of protection, would be beneficial.

Summary of Alternative D Effects on Wildlife

Effects to wildlife from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year on BLM-managed lands) may cause adverse effects on wildlife, but on an extremely local scale and minor in magnitude. Any mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres), so consequently only a small portion of the wildlife species found on BLM-managed lands could be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Management actions, such as the establishment of SMAs, may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wildlife species or habitats, resulting in beneficial effects. The two SRMAs, primarily the Haines Block, would be managed to avoid adverse effects on wildlife resources. ROPs and/or stipulations (Appendix D, FWH 1-14) identify measures to minimize effects on wildlife.

4.3.1.6 Vegetation

4.3.1.6.1 Direct and Indirect Effects Common to All Alternatives for Vegetation

Site-specific activities would require adherence to land use management decisions, NEPA analysis, special status species review and determination of the need for pre-project surveys and/or development of mitigation measures for management of likely special status species populations and habitat.

Currently, the only T&E plant species within the BLM planning area is the Aleutian shield fern. Should additional T&E species listed under the Endangered Species Act (ESA) be found on unselected BLM-managed lands, the lands are required to remain in federal ownership (6840.06A4) (BLM 2001b). T&E species and their habitat are managed in cooperation with the USFWS.

The management policies and actions that cause direct loss of vegetation resources discussed below would also apply to the direct loss of unique habitats where special status species are more likely to occur. The likelihood of impact to special status plants or their habitats is less than that of the general vegetation community, primarily because special status plant populations are limited in size and area. When habitat that is likely to support a special status plant is within a project area, the project will be reviewed for special status plant concerns.

Wildlife Effects on Vegetation (Common to All)

Under all alternatives, critical habitat for listed species across Alaska has been designated for USFWS and NMFS managed T&E species. It is possible that critical habitat designation would provide protection for the vegetation located within the area through the restriction of development activities by way of ESA Section 7 restrictions against adverse modification or destruction of such habitat. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, it is dependent upon the purpose and function of the critical habitat, and the action resulting in adverse destruction or modification.

Wildland Fires and Fuels Management Effects on Vegetation (Common to All)

Ninety-two percent of Alaska is designated as Limited and Modified Management, meaning that naturally occurring fires are desired with some constraints. Eight percent of the remaining lands within the State of Alaska (seven million acres) are designated as Critical or Full Management where suppression and/or fuel treatments are actively employed. Although direct loss of vegetation would initially occur from wildland fires, mechanical or manual treatments, and prescribed burns, this loss would be considered relatively short-term, and generally beneficial to the regional vegetation resources over the long-term. The effects of wildland fire and fuels management would be most pronounced in the Cook Inlet Ecoregion taiga forests of southcentral Alaska (BLM 2004l).

Suppression activities that would occur under all alternatives may cause a long-term departure from the natural process, and introduce effects of fire management activities such as retardant (BLM 2004l). In the boreal forests (taiga), suppression activities increase old spruce dominated stands, reduce forest productivity and diversity, which in turn may reduce wildlife habitat quality (BLM 2005k). Continued fire management activities may allow for the establishment of invasive

plants through suppression activities. BLM would monitor vegetative communities for the cumulative effects of wildland fire, suppression actions, and the effects of excluding fire from the landscape. Effects to sensitive species would vary depending on a variety of factors, including range and distribution, life history and preferred habitats (BLM 2004l). The effects of wildland fire management and fuel management activities would be minimized through adherence to the requirements of threatened and endangered species, critical habitat, and other unique habitats. Desired ecological conditions for vegetation resources are described in the BLM Alaska Statewide Land Health Standards (BLM 2004u).

Wildland fire use, mechanical or manual treatments, and prescribed burning that may occur under all alternatives may be used to return forest stands to less hazardous, early regenerative stages; create seedbeds; enhance forage values for wildlife; maintain and improve browse quality and quantity; and rejuvenate old stands of deciduous trees. Fuels management can produce favorable conditions for conifers, or for deciduous forest, depending on prescription and initial condition. Fires in tundra transitional zones have been shown to facilitate colonization by shrubs, and increased fire use in these areas would have the effect of converting some tundra areas to shrub-dominated communities. Continued management activities may introduce invasive plants into relatively remote and undisturbed areas by fire crews, equipment aircraft, and dozers. However, BLM would attempt to hinder the introduction of invasive species by using original soil and vegetation to rehabilitate fire and dozer lines, use of native vegetation and seed when seeding or plugging is necessary, and developing rehabilitation plans by working with BLM wildlife biologists and botanists (BLM 2004l). BLM would monitor vegetative communities for the cumulative effects of wildland fire, suppression actions, and the effects of excluding fire from the landscape.

Cultural and Paleontological Resources Effects on Vegetation (Common to All)

Activities associated with cultural resource management that may affect vegetation resources include archaeological and paleontological excavations. These activities would require the removal of vegetation from the excavation site; however, it is likely that these effects would be localized and short-term. Mitigation measures would include evaluation of implementation plans and revegetation activities upon completion of such projects (BLM 1998b). Excavation crews could introduce invasive plants to remote areas, and facilitate the spread of invasive plants through the removal of native vegetation and soil disturbance activities. Mitigation measures may include rehabilitation of the site with native vegetation upon completion of the excavation project. Within the Ring of Fire planning area, there are very few archaeological and paleontological excavations; therefore effects would be localized.

Forestry Effects on Vegetation (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Given the relatively low value and limited demand for the timber in the Ring of Fire planning area, most of the timber harvested would come as an ancillary benefit from other construction projects such as ROW clearing or other permitted activities.

Forestry management actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. The spruce bark beetle has caused over 2.3 million acres of tree mortality on the Kenai Peninsula alone since 1992. As the recent warming trend continues, outbreaks of defoliating forest pests, such as the spruce budworm, coneworm, and larch sawfly, have increased. Together, these insects have affected a total of 800,000 acres of boreal forest vegetation (Parson, Carter et al. 2001). In southeast Alaska, coastal forests have suffered outbreaks from the defoliating western black-headed budworm. The effects of insects (800,000 acres) are likely to be more noticeable than minor effects resulting from timber harvests (approximately 20 acres).

Lands and Realty Effects on Vegetation (Common to All)

Disposals and Acquisitions – In an effort to ensure protection of sensitive plant species and critical habitat, BLM is required to develop, to the extent practicable, inventory programs that document the occurrence, distribution, population, dynamics, and habitat conditions of all listed species on lands administered by BLM, and evaluate the significance of lands administered by BLM in the conservation of those species (6840.06A1a) (BLM 2001b). Should ESA-listed species be located on unselected BLM-managed lands, the lands are required to remain in federal ownership (6840.06A4) (BLM 2001b). Should BLM-managed lands be transferred to other federal agencies (e.g., NPS, USFS, or USFWS) management, vegetation resources would likely be managed under similar protective measures as for vegetation resources.

Leasable, Locatable, and Salable Minerals Effects on Vegetation (Common to All)

Potential effects associated with exploration, development, and production activities are described below. However, new mineral exploration or development would be limited in extent within the Ring of Fire planning area (Appendix G).

Exploration – Effects on vegetation resources associated with exploration activities may result from seismic tests, exploratory drilling, land clearing, accidental discharges, gravel roads, work camps, and temporary gravel pads (ADNR 2005k). These effects would generally be localized and short-term. Drill pads for exploratory wells generally affect less than two acres of vegetation and access roads disturb approximately six acres per mile of the road. Seismic surveys may cause short- to long-term effects depending on the vegetation type, snow conditions, and depth of frozen ground. The effect on vegetation by seismic surveys would not be substantial if the disturbed population could be reestablished to its original State and condition, or if the population is sufficiently large or resilient enough to respond to disturbance without measurable changes.

Development and Production – Effects on vegetation resources associated with development and production activities may result from gravel pits, pads and roads, dock and bridge construction, drilling rigs, pipelines, work camps, trucking, well heads, and reinjection wells. Land clearing and grading activities necessary for construction remove vegetation and compact soils, which contributes to the establishment of invasive weeds. These effects are generally localized, but long-term relative to exploration activities. The footprint of production drill pads has decreased dramatically over the years, and now affects two to four acres. If held to “pool rules” (20 AAC 25.520), a maximum of four oil wells or one gas well would be allowed per 640 acres. Should an oil spill or natural gas blowout occur, vegetation conditions on most sites are ultimately reclaimed. An adverse effect on vegetation could result if development outpaces reclamation and reestablishment of native vegetation. If aggressive invasive non-native plants

are introduced, impacts could be long term and permanent as these species could monopolize the disturbed area and move into adjacent areas. Mitigation measures include the removal of structures used for production and rehabilitation of the disturbed areas once the field ceases to produce oil and gas (ADNR 2005K). Native species will be used for rehabilitation and permittees may be held responsible for the introduction and spread of non-native invasive species caused by their actions.

Oil production sites often include several production wells, water injectors, gas injection wells, and a waste disposal well. Produced water is generally either injected in an onsite disposal well or transported by truck or a small diameter pipe to an offsite disposal well. Other utility lines may also be necessary. Natural gas pipelines require a trench approximately three to six feet wide and four feet deep. Additional restoration efforts would be necessary to mitigate the effects of these activities. The full magnitude of production effects is dependent upon the location, depth, size, and geology (ADNR 2005k). Production and processing equipment at a typical gas well location might consist of a wellhead, a production separator, a dehydrator, and tanks. During processing, a production separator removes most of the water and liquid hydrocarbons and a dehydrator removes any remaining water in the gas. The gas then goes through a metering facility and into a sales or gathering pipeline.

Coalbed Natural Gas – Exploration for CBNG usually requires four to five wells, each requiring a gravel pad approximately one acre in size. Mud and cuttings are typically disposed of on-site, and do not generally contain hazardous materials. Upon completion of exploration, the drill rig, all debris and other waste materials are removed from the site. Currently, no development of CBNG has occurred in Alaska. However, development scenarios predict an average of five to seven acres of vegetation resources would be affected per well. This includes construction and operation of the well site, support sites (i.e., field and sales compressor, gathering and sales lines), access roads, temporary roads, pump stations, injection facilities, utility lines and pipelines. Requirements to utilize existing road systems, where practicable, or vehicles that do not cause significant damage to ground surface or vegetation would reduce some of these effects (ADNR 2005k).

Renewable Energy Effects on Vegetation (Common to All)

Under all alternatives, lands available for potential renewable energy program sites would be evaluated on a case-by-case basis. Some lands have already been identified as potential energy sources within the BLM planning area; however, no development activities are planned at this time (Section 3.3.9). Effects to vegetation associated with renewable energy programs are generally smaller in magnitude and extent relative to mineral exploration, development or production.

4.3.1.6.2 Alternative A for Vegetation

Lands and Realty Effects on Vegetation (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Where easements are transferred to the NPS, USFS, or USFWS, the condition of vegetative resources associated with these easements would likely be maintained through the use of Standard Operating Procedures, best management practices, or mitigation measures, which would also help prevent the introduction and establishment of invasive plants.

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. Effects to vegetation resources or habitats could result from the clearing and grubbing of vegetation for the corridors. However, based on the low numbers of past ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM lands would be local in scale, and any adverse effects to vegetation resources would be minimal and not extend to the regional level.

Leasable, Locatable, and Salable Minerals Effects on Vegetation (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*; however these effects would be limited given the small number of acres designated as having high development potential on BLM-managed lands.

Off-Highway Vehicles Effects on Vegetation (Alternative A)

Under Alternative A, no OHV designations are in place or are planned for the Ring of Fire planning area, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. As currently managed, OHV use is allowed on all terrain, including sensitive habitats such as wetlands, near fish-bearing streams, and possibly through areas that support sensitive species. OHVs harm vegetation through abrading, compression, shearing, ponding and erosion, which may all degrade the ecology of an area (Sparrow, F. J. Wooding et al. 1976; USACE 1980; Sinnott 1990). In wet conditions, (e.g., spring break-up), trails may become entrenched and widen as users search for different paths. Although natural vegetation may recover over time if the trail is abandoned, the effect may permanently alter the site's thermal, soil, and hydrologic characteristics (Meyer 2004). One study conducted in the Wrangell-St. Elias National Park and Preserve of Alaska documented the average trail width to be 35 feet, equating to 4.2 acres of affect per one mile of trail (Connery 1984). Braided trail sections more than 200 feet wide have also been documented in Alaska (Meyer 2004). OHVs may also introduce invasive plants to remote environments, and facilitate their spread through disturbance of the soil and existing vegetation (Leung and Marion 2000). Adverse effects on vegetation from OHV use are generally localized and minor in scale, except for high use areas such as the Knik River drainage, where adverse effects in specific locations can be moderate.

In the Alaska Peninsula/Aleutian Islands region, OHV trails center on villages and are generally used to gain access to subsistence areas. The Buskin River Drainage receives a large amount of OHV activity in the Kodiak Region, and aerial photographs indicate that the Knik River Valley of the Southcentral region is extensively used by OHVs and other motorized vehicles, although trail networks are found throughout southcentral Alaska. Most of the BLM-managed lands in southeast Alaska are too steep for OHV use, although use has been recorded in the upper Tsirku and Takhin Rivers and the area surrounding Chilkoot Lake (Section 3.3.10).

Recreation Effects on Vegetation (Alternative A)

Under Alternative A, the Campbell Tract is the only SMA within the Ring of Fire planning area. Recreation use tends to be focused on road accessible areas surrounding large population centers. General effects to vegetation as a result of these activities include reduced plant height and vigor, loss of ground vegetation cover, invasive plant establishment, and tree trunk damage. Some vegetation types, such as alpine meadows, have much longer recovery rates from even limited degradation activities (Leung and Marion 2000). Given the generally unconsolidated nature of BLM-managed lands in the planning area, the relatively small parcel size, remote location of larger parcels, and lack of designated trails and facilities on BLM-managed lands, adverse effects from recreation activities on vegetation are localized and minor in magnitude.

Summary of Alternative A Effects on Vegetation

The current management actions under the Alternative A would maintain the effects to the vegetation resources at current levels. As OHV use continues to go unrestricted, adverse effects to BLM-managed vegetation resources through direct loss of habitat and the loss of habitat functions and values could continue and result in moderate effects in areas of high use such as the Knik River Valley. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation in localized areas. Any possible effects from renewable energy, recreation, or wildland fire and fuel management would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the vegetation found on BLM-managed lands may be affected, and effects would be minor in magnitude.

4.3.1.6.3 Alternative B for Vegetation

Lands and Realty Effects on Vegetation (Alternative B)

Acquisitions and Access – Acquisitions and access decisions that may affect vegetation under Alternative B are the same as discussed under Alternative A and would maintain effects at current levels.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative B. Previously withdrawn lands that were not selected by the State or Native Corporations would then be available for consideration of disposal. Because of the constraints currently in place under these withdrawals, relinquishment of the withdrawals could increase potential resource development and vegetation disturbing activities. Given the limited potential for mineral development, effects on vegetation would be localized and minor.

Leasables, Locatables, and Salables Effects on Vegetation (Alternative B)

Under this alternative, localized adverse effects to vegetation may occur (described in *Direct and Indirect Effects Common to All*). Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Off-Highway Vehicle Effects on Vegetation (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open,” with the exception of the closures at Campbell Tract and BLM parcels within Chugach State Park. Because OHV use on BLM-managed lands is currently unrestricted, this management action would have similar effects as Alternative A and could result in adverse effects in localized areas.

Recreation Effects on Vegetation (Alternative B)

Under Alternative B, recreation effects to the vegetation resources would be similar to those effects described under Alternative A and would generally be minimal.

Summary of Alternative B Effects on Vegetation

The management actions proposed under the various management categories of Alternative B would result in effects on vegetation similar to Alternative A. Potential adverse effects from forestry (approximately 20 acres per year), renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. With the revocation of ANCSA 17(d)(1) withdrawals, mineral exploration could increase; however, areas with potential for disturbance from mineral development represent 2,618 acres, or less than one percent of BLM-managed lands within the Ring of Fire planning area. Consequently, only a small portion of the vegetation found on BLM-managed lands could be affected. Designating the planning area as “open” to OHV use would continue to create adverse effects to BLM-managed vegetation resources, similar to the current undesignated status, through direct loss of habitat and the loss of habitat functions and values. Adverse effects would generally be localized and minor in nature, except in high use areas such as the Knik River where moderate adverse effects to vegetation could occur due to OHV use. Introduction of invasive plants could lead to increased loss of, and permanent displacement of native vegetation. Vegetation treatments like invasive species control, forest health treatments, fuels reduction, and wildlife habitat improvements are likely to cause short-term adverse effects, and long-term beneficial effects.

4.3.1.6.4 Alternative C for Vegetation

Lands and Realty Effects on Vegetation (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Even though these areas are remote in nature, minimizing the levels of access by development or recreation vehicles would help to maintain vegetation through the prevention of road building.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect vegetation in these areas by providing further management protections through the development of specific implementation plans.

Leasables, Locatables, and Salables Effects on Vegetation (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on vegetation. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Off-Highway Vehicles Effects on Vegetation (Alternative C)

Lands would be designated as “limited” to OHV use consistent with ADNR’s *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning could result in beneficial effects to vegetation relative to the current level of effects. Areas of high OHV use, such as the Knik River, may experience the highest level of beneficial effects for recovering damaged vegetative resources.

Recreation Effects on Vegetation (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Recreational effects to vegetation resources on BLM-managed lands would likely be similar to the current levels, and reduced in the specially designated areas listed above.

Wild and Scenic Rivers Effects on Vegetation (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Vegetation within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Vegetation

Effects on vegetation from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation, unless appropriately mitigated. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the vegetation found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected vegetation resources. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative C may result in adverse effects to vegetation resources of a lesser extent and magnitude than Alternatives A, B, or D.

4.3.1.6.5 Alternative D for Vegetation

Lands and Realty Effects on Vegetation (Alternative D)

Acquisitions and Access – Acquisitions and access actions that may affect vegetation under Alternative D could be beneficial as discussed under Alternative C, except the Neacola Mountains ACEC would not be identified as an avoidance area.

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for leasing and disposal. Because of the constraints in place under these withdrawals, there would be an increased potential for resource development and potential vegetation disturbing activities.

Leasable, Locatable, and Salable Minerals Effects on Vegetation (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities,

including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of vegetation in those areas.

Off-Highway Vehicles Effects on Vegetation (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects to vegetation relative to the current level of effects. Areas of high OHV use, such as the Knik River SRMA, may experience the highest level of beneficial effects on vegetation if use is limited to existing roads and trails.

Recreation Effects on Vegetation (Alternative D)

Effects from recreation on vegetation under Alternative D would be similar to current levels as discussed under Alternative C.

Summary of Alternative D Effects on Vegetation

Under Alternative D, adverse effects to vegetation from future management are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation. Any possible effects from renewable energy, recreation, or fire would be limited to the areas where these activities occur and potential effects are not likely to extend beyond the planning area, or to the region. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (less than 2,618 acres); consequently only a small portion of the vegetation found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected vegetation resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative D may result in adverse effects to vegetation resources of a lesser extent and magnitude than the current management activities. ROPs and/or stipulations (Appendix D, Veg 1-14) identify measures to minimize effects on vegetation.

4.3.1.7 Wetlands-Riparian

4.3.1.7.1 Direct and Indirect and Indirect Effects Common to All Alternatives for Wetlands-Riparian

Direct Loss of Special Status Species

The management policies and actions that cause the direct loss of wetland and riparian resources discussed below would also apply to the direct loss of unique habitat, and sensitive, protected, and/or T&E species. However, the likelihood of such losses is substantially less than that of general wetland and riparian habitat loss, largely because sensitive populations are smaller and protective measures are in place to avoid such effects. Desired ecological conditions for wetland-riparian resources are described in the BLM Alaska Statewide Land Health Standards (BLM 2004u).

Wildland Fires and Fuels Management Effects on Wetland-Riparian (Common to All)

Wetlands and riparian areas in Alaska are generally more resistant to fire than surrounding wildlands, therefore, the effects of fire in those areas are often more limited. More extreme effects tend to occur due to suppression efforts. Large mechanized equipment and/or excessive use of smaller motorized vehicles can cause damage to wetland and riparian zones and underlying permafrost, but because riparian areas are often utilized by suppression resources as natural barriers to fire spread, heavy equipment use is usually quite limited. The use of retardant in riparian areas can have detrimental effects. The effects of wildland fire and fuels management would be most pronounced in the Cook Inlet Ecoregion taiga forests of the southcentral Alaska (BLM 2004l).

Some sensitive species would benefit from continued aggressive fire suppression activities that minimize loss of individuals, populations, or habitats. Conversely, fire suppression activities may also affect sensitive species through mortality, disturbance, displacement, damage, or alteration of key habitat components. Effects to sensitive species and their habitat would vary depending on a variety of factors, including range and distribution, life history and preferred habitats (BLM 2004l).

Cultural Resources and Paleontology Effects on Wetland-Riparian (Common to All)

Activities associated with cultural resource management that may affect wetland resources include archaeological and paleontological excavations. These activities would require the dredging of wetlands at the excavation site; however, it is likely that these effects would be localized and short-term. Mitigation measures would include evaluation of implementation plans and rehabilitation activities upon completion of such projects (BLM 1998b).

Renewable Energy Effects on Wetland-Riparian (Common to All)

Under all alternatives, lands available as potential renewable energy program sites would be evaluated on a case-by-case basis. Some lands have already been identified as potential energy sources within the BLM planning area; however, no development activities are planned at this time (Section 3.3.9). Effects to wetland resources associated with renewable energy programs are generally smaller in magnitude and extent relative to mineral exploration, development or production.

Wind, hydroelectric and solar power projects would affect wetland resources in similar ways. These effects would largely result from construction activities, such as the dredge and fill of wetlands or riparian areas for infrastructure construction, utility corridors, access roads, and transmission lines. Hydroelectric development would convert areas or riparian and wetland values to open water and relocated wetlands and riparian lands. The magnitude and extent of these effects would vary for each project (BLM 2001c; BLM 2001d; BLM 2004q). Wetlands characteristics may limit the constructability of some structures.

Leasable, Locatable, and Salable Minerals Effects on Wetlands-Riparian (Common to All)

Groundwater could be affected during construction of drill pads or by other exploration and development activities. Improper casing and cementing of wells, undetected spills, or leachate from produced water or mud pits, could introduce contaminants into the groundwater. Chemicals used for production drilling could cause local contamination of soils and groundwater if not managed properly. Construction of drilling pads, proper disposal practices, proper casing and cementing, and recycling of drilling fluids would be in accordance with BLM guidelines and should minimize adverse effects on groundwater quality.

Hydrologic investigations would be conducted before CBNG development to determine whether any connection existed between surface waters and the aquifer that would be dewatered. Appropriate measures would be taken to prevent adverse effects on water quality during dewatering. Dewatering during CBNG production could affect the quantity of groundwater by changing flow gradients.

4.3.1.7.2 Alternative A for Wetlands-Riparian

Lands and Realty Effects on Wetlands-Riparian (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Where conservation easements are purchased or managed, development should be limited to existing improvements, which would have a status quo effect on wetlands and riparian areas. 17(b) easements provide access to lands managed by the NPS, USFS, or USFWS, and once lands are conveyed, the easement is managed by the respective agency. The condition of wetland and riparian resources associated with these easements would likely be maintained.

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. ROWs are generally used for communication sites, utility corridors, access to mining claims, and timber resources typically remain under BLM management. Effects to wetland and riparian resources could result from the clearing and grubbing of vegetation for the corridors. However, based on the low numbers of past ROW applications within the Ring of Fire planning area, it is anticipated that any proposed road projects crossing BLM lands would be local in scale, and any adverse effects to wetland and riparian resources would not extend to the regional level.

Access (17(b) Easements) – BLM will manage conservation easements and ANCSA 17(b) easements that will allow limited rights for access across private native corporation lands. Construction of access roads or trails on ANCSA 17(b) easements may affect wildlife in the local region by increasing access to public lands accessed by the easement. Where 17(b) easements

are transferred to the NPS, USFS, or USFWS, the condition of wetlands and riparian areas associated with these easements would likely be maintained.

Leasable, Locatable, and Salable Minerals Effects on Wetland-Riparian (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). It is assumed the amount of mineral exploration and development that would occur during the planning period under this alternative would be related to the amount of acreage available for such development. The land area available for lease and mining claims would be most restrictive under this alternative; thus the potential for mineral development would likely decrease. Withdrawing areas from mineral development reduces the degree to which surface disturbance can occur, which in turn reduces adverse effects on watershed resources and water quality.

Off-Highway Vehicles Effects on Wetland-Riparian (Alternative A)

Under Alternative A, no OHV designations are in place or are planned for the Ring of Fire planning area, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. As currently managed, OHV use is allowed on all terrain, including sensitive habitats such as wetlands, near fish-bearing streams, and possibly through areas that support sensitive species. OHVs harm wetland and riparian resources through abrading, compression, shearing, and erosion, which may all degrade the ecology of an area (USACE 1980; Sinnott 1990). In wet conditions, (e.g., spring break-up), trails may become entrenched and widen as users search for different paths. Although natural vegetation may recover over time if the trail is abandoned, the effect may permanently alter the site's thermal, soil, and hydrologic characteristics (Meyer 2004). One study conducted in the Wrangell-St. Elias National Park and Preserve of Alaska documented the average trail width to be 35 feet, equating to 4.2 acres of affect per one mile of trail (Connery 1984). Braided trail sections more than 200 feet wide have also been documented in Alaska (Meyer 2004).

In the Alaska Peninsula/Aleutian Chain region, OHV trails center on villages and are generally used to gain access to subsistence areas. The Buskin River Drainage receives a large amount of OHV activity in the Kodiak Region, and aerial photographs indicate that the Knik River Valley of Southcentral region is extensively used by OHVs and other motorized vehicles, although trail networks are found throughout southcentral Alaska. Most of the BLM-managed lands in southeast Alaska are too steep for OHV use, although use has been recorded in the upper Tsirku and Takhin Rivers and the area surrounding Chilkoot Lake (Section 3.3.10).

Recreation Effects on Wetland-Riparian (Alternative A)

Current recreation activities that occur on BLM lands include sport fishing, motorized and non-motorized boating, camping, hiking, skiing, commercial recreation activities (e.g., guides and outfitters, heli-skiing, glacier tours, etc.), sightseeing, wildlife viewing, traditional recreation activities and OHV use (see above for a discussion of OHV management effects). Recreation use tends to be focused on road-accessible areas surrounding large population centers.

General effects to wetland and riparian areas as a result of these activities include reduced plant height and vigor, loss of ground vegetation cover, and tree trunk damage (Leung and Marion 2000).

Summary of Alternative A Effects on Wetlands-Riparian

The current management actions under Alternative A would maintain the effects to the wetland and riparian resources at current levels (although an increase would be expected with an increase in population). However, as BLM continues to allow OHV use and other recreational activities to go unrestricted, adverse effects to BLM-managed wetland and riparian resources through direct loss of habitat and the loss of habitat functions and values could continue. Any possible effects from renewable energy, recreation, or wildland fire and fuels management would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetlands and riparian resources found on BLM-managed lands may be affected. Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A would continue to adversely affect wetland and riparian resources in localized areas where development and managed activities are occurring.

4.3.1.7.3 Alternative B for Wetlands-Riparian

Lands and Realty Effects on Wetlands-Riparian (Alternative B)

Acquisitions and access decisions that may affect wetlands under Alternative B are the same as discussed under Alternative A. In general, wetlands would be maintained in their current condition.

Leasables, Locatables, and Salables Effects on Wetlands-Riparian (Alternative B)

Under this alternative, localized adverse effects to wetlands may occur (described in *Direct and Indirect Effects Common to All Alternatives*). Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Off-Highway Vehicles Effects on Wetlands-Riparian (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open,” with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. Because OHV use on BLM-managed lands is currently unrestricted, this management action would have similar effects as Alternative A on wetlands and riparian resources.

Recreation Effects on Wetlands-Riparian (Alternative B)

Under Alternative B, no SMAs would to be designated. Recreational effects to the wetland and riparian resources may increase in magnitude, extent, likelihood, and duration, as described under Alternative A.

Summary of Alternative B Effects on Wetlands-Riparian

The management actions proposed under the various management categories of Alternative B would maintain the effects to the wetland and riparian resources at levels similar to Alternative A (although an increase would be expected with an increase in population). However, as OHV use continues to go unrestricted, adverse effects to BLM-managed wetland resources through direct loss of habitat and the loss of habitat functions and values could continue. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetlands and riparian resources found on BLM-managed lands may be affected.

4.3.1.7.4 Alternative C for Wetlands-Riparian

Lands and Realty Effects on Wetlands-Riparian (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Even though these areas are remote in nature, minimizing the levels of access by development or recreation vehicles would help to maintain wetlands through the preventing of road building.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect any wetland and riparian resources in these areas by providing further management protections through the development of specific implementation plans.

Leasables, Locatables, and Salables Effects on Wetlands-Riparian (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on wetlands and riparian areas. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Off-Highway Vehicles Effects on Wetlands-Riparian (Alternative C)

Lands would be designated as “limited” to OHV use consistent with ADNR’s *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to wetland and riparian resources relative to the current level of effects. Areas of high OHV use, such as the Knik River, may feel the highest level of beneficial effects to recovering damaged wetland and/or riparian resources.

Recreation Effects on Wetlands-Riparian (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. Recreational effects to wetland and riparian resources on BLM-managed lands would likely be similar to the current levels, and reduced in the specially designated areas listed above.

Wild and Scenic Rivers Effects on Wetlands-Riparian (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Wetland and riparian resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Wetlands-Riparian

Effects to wetland and riparian resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetland and riparian resources found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to wetlands. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wetland and riparian resources in localized areas. Available

information described in the sections above indicate that the adoption of the management actions as described under Alternative C may result in adverse effects to wetland resources of a lesser extent and magnitude than the current management activities.

4.3.1.7.5 Alternative D for Wetlands-Riparian

Lands-Realty Effects on Wetlands-Riparian (Alternative D)

Acquisitions that may affect wetlands and riparian resources would likely be maintained under Alternative D as discussed under Alternative C, except the Neacola Mountains ACEC would not be identified as an avoidance area.

Withdrawals – ANCSA 17(d)(1) withdrawal orders would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for disposal. Because of the constraints in place under these withdrawals, there would be an increased potential for resource development and potential wetland and riparian disturbing activities.

Leasable, Locatable, and Salable Minerals Effects on Wetlands-Riparian (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of wetland and riparian resources in those areas.

Off-Highway Vehicles Effects on Wetlands-Riparian (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects to wetland and riparian relative to the current level of effects. Areas of high OHV use, such as the proposed Knik River SRMA, may have the highest level of beneficial effects on wetlands if use is limited, presuming that any area that might be designated for open OHV use in this area sufficiently guards against adverse effects to wetland and riparian resources.

Recreation Effects on Wetlands-Riparian (Alternative D)

Effects from recreation on wetland and riparian resources under Alternative D are the same as discussed under Alternative C and would be similar to current levels.

Summary of Alternative D Effects on Wetlands-Riparian

Under Alternative D, effects to wetland and riparian resources from future management are likely to be limited in scale, or concentrated in specific areas. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetland and riparian resources found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to wetland and riparian resources. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wetland and riparian resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative D may result in adverse effects to wetland and riparian resources of a lesser extent and magnitude than the current management activities. ROPs and/or stipulations (Appendix D, Wetlands 1-3) identify measures to minimize effects on wetlands and riparian resources.

4.3.1.8 Visual

4.3.1.8.1 Direct and Indirect Effects Common to All Alternatives for Visual

The following sections discuss the potential direct and indirect effects of the alternatives on visual resources.

Wildlife Effects on Visual (Common to All)

Under all alternatives, critical habitat for listed species across Alaska has been designated for USFWS and NMFS T&E species. Critical habitat designation may provide additional protection for visual resources located within the area by limiting development activities by way of ESA Section 7 restrictions against adverse modification or destruction of such habitat. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, it is dependent upon the purpose and function of the critical habitat, and the action resulting in adverse destruction or modification.

Wildland Fires and Fuels Management Effects on Visual (Common to All)

Ninety-two percent of the State of Alaska is designated as Limited and Modified fire management, meaning that naturally occurring fires are desired, but do have some constraints (refer to Figures 3.3-1 through 3.3-4 for an illustration of these fire management options). Direct loss of vegetation would occur from wildland fires, mechanical or manual treatments, and prescribed burns, causing a change to the existing landscape character that could persist for years. The effects of wildland fire and fuels management may be most pronounced within the more heavily forested and populated areas of southcentral and southeast Alaska.

Forestry Effects on Visual (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Timber harvest and associated activities, including thinning, road building, and slash disposal, can drastically alter the form, line, color, and texture of the visual landscape. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula.

Lands and Realty Effects on Visual (Common to All)

Consolidating management of lands through disposals, acquisitions, and exchanges may facilitate better protection of visual resources, while disposals may result in some deterioration to visual resources.

Leasable, Locatable, and Salable Minerals Effects on Visual (Common to All)

Mining and oil and gas leasing may have adverse effects on the visual resources of an area. If roads were authorized through ROWs associated with development on non-BLM-managed lands, or other development associated with mining or oil and gas leasing, there may be

localized, but long-term effects to the form, line, color, and texture of the visual landscape. Effects to visual resources could span well beyond the actual footprint of development activities, as structures or other development can often be seen from miles away. However, the terrain in much of the Ring of Fire planning area could allow development to remain shielded from most viewers, which would reduce any adverse effects of development on visual resources. Surface disturbing activities associated with the construction of facilities and pipelines, transmission lines, communication lines, and oil and gas development, would not have adverse effects on visual resources in the Ring of Fire planning area, as the areas where development would likely occur would be compatible with Visual Resource Management (VRM) Class IV objectives.

Renewable Energy Effects on Visual (Common to All)

Under all alternatives, land available as potential renewable energy program sites would be evaluated on a case-by-case basis. Some lands have already been identified as potential energy sources within the BLM planning area, however no development activities are planned at this time (Section 3.3.9). Effects to visual resources associated with renewable energy programs are generally less severe in magnitude and extent relative to other development activities.

4.3.1.8.2 Alternative A for Visual

Lands and Realty Effects on Visual (Alternative A)

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. ROWs are typically used for communication sites, utility corridors, or for access to mining claims, and timber resources usually remain under BLM management. As growth and development continues in the Ring of Fire planning area, the need for ROWs for transportation and utility corridors would increase. Potential new access routes may change the existing form, line, color, and texture of the visual landscape. However, the number of annual ROW applications for the Ring of Fire planning area is extremely low, so any effects would be minimal.

Withdrawals – No withdrawal review would occur under this alternative, and all existing withdrawals would stay in place. Because of the constraints in place under these withdrawals, mineral development would not occur on most withdrawn lands, thus helping to maintain the visual landscape.

Leasable, Locatable, and Salable Minerals Effects on Visual (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Potential effects from mineral exploration and development are discussed above under *Direct and Indirect Effects Common to All Alternatives*.

Off-Highway Vehicles Effects on Visual (Alternative A)

There are currently no OHV designations in place or planned within the Ring of Fire planning area, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. The number of OHV trails throughout Alaska and the Ring of Fire planning area increase yearly (Bane 2001). These trails fragment the natural landscape, creating varying degrees of changes to the existing visual character of the area. Braided trail sections of more than 200 feet wide have been documented in Alaska (Meyer 2004), and could occur on BLM-managed lands if trail use is not limited and seasonal restrictions are not enforced. Important viewpoints and visual resources that may have been previously inaccessible may become part of an expanding network of OHV trails, especially in areas of established high use, such as the Knik River. Within high use areas, adverse effects on visual resources could be moderate for non-motorized recreationists. In general, adverse effects to visual resources under Alternative A are localized in nature, and are likely to occur away from major road systems.

Summary of Alternative A Effects on Visual

The management actions proposed under Alternative A would have a variety of effects on visual resources occurring on BLM-managed lands. Management would maintain any effects on visual resources at their current expected levels, given that current management does not establish VRM classifications. As OHV use continues to go unrestricted, minimal adverse effects to BLM-managed visual resources may continue, primarily in areas of high use such as the Knik River. Potential mineral exploration and development, and the creation of new ROWs both have the potential to adversely affect visual resources, however any effects would likely be minimal based on the limited potential for mineral development on BLM-managed lands within the planning area (2,618 acres or less). Available information described in the sections above indicate that the adoption of the current management actions as described under Alternative A may have localized, adverse effects on visual resources.

4.3.1.8.3 Alternative B for Visual

Lands and Realty Effects on Visual (Alternative B)

Sales – Several parcels have been identified for sale under this alternative (Table 2.3-1). However, due to the small, scattered nature of these parcels, any development or alterations in the visual landscape resulting from their sale would be minimal because many of the parcels already contained structures and the expectation is that current levels of development would remain similar

Acquisitions – Under Alternative B, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Easements provide access to lands managed by BLM, State of Alaska, NPS, USFS, or USFWS, and once lands are conveyed, the easement is managed by the respective agency. The visual quality of these easements would likely be maintained.

Access (ROWs) – There are no avoidance or exclusion areas identified within the Ring of Fire planning area under this alternative. ROWs are typically used for communication sites, utility corridors, or for access to mining claims, and timber resources usually remain under BLM management. Potential new access routes may change the existing form, line, color, and texture

of the visual landscape. However, the number of annual ROW applications for the Ring of Fire planning area is extremely low, so any effects would be minimal.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under this alternative, making more lands available for consideration for leasing and disposal. Because of the constraints currently in place under these withdrawals, relinquishment could increase potential resource development and adverse effects on visual resources. However, given the low potential for mineral development, effects on visual resources would be minor. The typical terrain of the planning area would lend itself to shield construction and facilities, minimizing adverse effects to the visual landscape.

Leasable, Locatable, and Salable Minerals Effects on Visual (Alternative B)

Under this alternative, additional lands would be open to mineral entry with the revocation of ANCSA 17(d)(1) withdrawals. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D), which would include protections for visual resources. The typical terrain of the planning area would lend itself to shield construction and facilities, minimizing adverse effects to the visual landscape.

Off-Highway Vehicles Effects on Visual (Alternative B)

All lands within the Ring of Fire planning area would be designated as “open” under Alternative B, with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. Because OHV use on BLM-managed lands is currently unrestricted, this management action would have similar effects as Alternative A. Increasing OHV trail creation and widening causes changes to the existing form, line, color, and texture of the visual landscape. Important viewpoints and visual resources that may have been previously inaccessible may become part of an expanding network of OHV trails, especially in areas of established high use such as the Knik River.

Summary of Alternative B Effects on Visual

Effects on visual resources use from management proposed under Alternative B would primarily be limited to a small portion of BLM-managed lands. All lands under Alternative B would be managed as VRM Class IV, which would allow actions that make major modifications to the existing character of the landscape (Figures 2.4-1 through 2.4-4). OHV use would continue to be undesignated on all lands within the Ring of Fire planning area, and may create changes in the existing landscape character and access to visual resources. Forestry (20 acres per year), ROWs, and mineral development (2,618 acres or less) would have a minimal effect on visual resources on BLM-managed lands. Stipulations or ROPs (Appendix D, VRM 1-6) associated with mineral exploration and development may contain protections for visual resources in specific locations. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative B would have minimal effects on visual resources, and effects would be on a very localized scale, primarily in high OHV use areas such as the Knik River.

4.3.1.8.4 Alternative C for Visual

Lands and Realty Effects on Visual (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Even though these areas are remote in nature, the current visual landscape in these areas would be maintained through the prevention of road building.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect visual resources in the SMAs and Iditarod NHT by providing further management protections through the development of specific implementation plans for these areas.

Leasable, Locatable, and Salable Minerals Effects on Visual (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Several areas are identified under this alternative to remain closed to leasable, locatable and salable mineral entry (Tables 2.3-2 and 2.3-3). The typical terrain of the planning area would lend itself to shield construction and facilities, minimizing adverse effects to the visual landscape.

Off-Highway Vehicles Effects on Visual (Alternative C)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Protections for visual resources, and limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to visual resources relative to the current level of effects. Areas of high OHV use, such as the Knik River, may experience the highest level of beneficial effects towards changing the existing landscape character.

Recreation Effects on Visual (Alternative C)

Under Alternative C, SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Visual resources would receive further levels of protection through the development of implementation plans in these areas, and all resources would be managed to meet the objectives of the specific SMAs (Appendix F).

Wild and Scenic Rivers Effects on Visual (Alternative C)

Under Alternative C, BLM identified 14 river segments as eligible for WSR designation, but were not determined to be suitable for WSR designation (Table 2.3-8). Identified ORVs for these river segments would be taken into consideration when reviewing proposed actions that might have an effect on the scenic quality and existing visual landscape around the rivers.

Summary of Alternative C Effects on Visual

Effects to visual resources from management proposed under Alternative C are likely to be limited in scale, or concentrated in specific areas. The Neacola Mountains ACEC, the Halibut Cove Forest Study Area (Figure 2.4-7), and the Lake Carlanna Municipal Watershed (Figure 2.4-8) would be designated as VRM Class II. Changes in the existing landscape for these areas would be low and not attract attention. BLM-managed lands within the remainder of the planning area would be designated as VRM Class III. All lands within the Ring of Fire planning area would be designated as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the visual setting in high OHV-use areas such as the Knik River SRMA. Effects from forestry (approximately 20 acres per year), ROWs, mining, oil and gas would likely be limited in extent; consequently only a small portion of visual resources on BLM-managed lands may be affected, and those effects would be minimal. Resources would receive further levels of protection through the development of implementation plans in the three SMAs, and would be managed to meet their outlined objectives (Appendix F). Fourteen river segments were identified as eligible, but not suitable for WSR designation under Alternative C. Identified ORVs for these river segments would be taken into consideration when reviewing proposed actions that might have an effect on the scenic quality and existing visual landscape around the rivers. The majority of these actions would minimize or mitigate adverse effects on visual resources through increased protections and regulation efforts. Actions that may adversely affect the visual landscape would only occur on a small portion of BLM-managed lands.

4.3.1.8.5 Alternative D for Visual

Lands and Realty Effects on Visual (Alternative D)

Access (ROWs) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4) would be identified as an avoidance area. Even though these areas are remote in nature, the current visual landscape in these areas would be maintained through the prevention of road building.

Acquisitions – Acquisitions of lands and easements would be handled the same as described under Alternative C. Land and easement acquisitions may produce a minimal beneficial effect by increasing the amount of land available for unrestricted OHV use. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. Acquisitions have the potential to beneficially affect visual resources in these areas by providing further management protections through further planning efforts.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative D. Potential effects on visual resources would be similar to Alternative B.

Leasable, Locatable, and Salable Minerals Effects on Visual (Alternative D)

Under Alternative D, effects would be the same as discussed under Alternative B. Similar to Alternative C, the Lake Carlanna Municipal Watershed (Figure 2.3-2) and the Halibut Cove Forest Study Area (Figure 2.3-1) would be closed to mineral entry. Revocation of the ANCSA 17(d)(1) withdrawals would open additional lands for mineral entry. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Any effects to visual resources occurring on those lands would occur at minor levels. The typical terrain of the planning area would lend itself to shield construction and facilities, minimizing adverse effects to the visual landscape.

Off-Highway Vehicles Effects on Visual (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three SMAs to OHV use. Because OHV use on BLM-managed lands is currently unrestricted, this management action would likely reduce OHV effects to the existing landscape character, especially in areas where implementation planning has outlined further resource protection guidelines and objectives.

Recreation Effects on Visual (Alternative D)

Management actions proposed under Alternative D are the same as those described under Alternative C. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. In areas of higher recreational use, such as the proposed Haines Block SRMA, the surrounding visual landscape plays an important part in the recreation experience. The visual landscape of the Neacola Mountains is an important component of its identification as a potential ACEC. Resources, including visual, would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F).

Summary of Alternative D Effects on Visual

Effects to visual resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas, such as the SMAs. The Lake Carlanna Municipal Watershed (Figure 2.4-9) and the Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II, where changes to the landscape character should be low, and not readily visible to the casual observer. The Neacola Mountains ACEC would be designated as VRM Class II as well. The remainder of BLM-managed lands within the planning area would be designated as VRM Class IV, which generally allows major modifications to the existing character of the landscape. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the visual landscape in high OHV-use areas, such as the Knik River SRMA. Forestry (20 acres per year), ROWs, and mineral development (2,618 acres or less) would have a minimal effect on visual resources on BLM-managed lands. Resources would receive further levels of

protection through the development of implementation plans in the three proposed SMAs, and would be managed to meet the objectives of the specific SMAs (Appendix F). The majority of these actions would have beneficial effects on visual resources through increased protections and regulation efforts. Actions that may adversely affect the visual landscape would only occur on a small portion of BLM-managed lands. ROPs and/or stipulations (Appendix D, VRM 1-6) identify measures to minimize effects on visual resources.

4.3.1.9 Paleontological Resources

4.3.1.9.1 Direct and Indirect Effects Common to All Alternatives for Paleontological Resources

Direct effects to paleontological resources are predicated on changes to the integrity of the fossil that make it distinguishable for identification. Indirect effects to paleontological resources include increased access to and close proximity of an undertaking to sensitive areas that could result in a greater vulnerability of paleontological resources to be damaged. Examples of adverse effects include destruction or partial destruction of the fossil or the site where it was discovered, or removal of the fossil from its location.

Prior to any proposed activity, identification of areawide criteria or site-specific use restrictions would be completed to ensure that: a) areas containing, or that are likely to contain, vertebrate or noteworthy occurrences of invertebrate or plant fossils are identified and evaluated prior to authorizing surface-disturbing activities; b) management recommendations would be developed to promote the scientific, educational, and recreational uses of fossils; and c) threats to paleontological resources would be identified and mitigated as appropriate. BLM would also seek appropriate partnership opportunities in using fossil resources off BLM lands to provide educational exhibits for the public when appropriate.

Forestry Effects on Paleontological Resources (Common to All)

Forest management and timber harvests may damage a variety of paleontological sites that could be effected by skidders, draglines, controlled burns, and tree felling. Timber sales would require roads for access to the timber, potentially increasing access to previously inaccessible areas and the potential for damage or looting to formerly inaccessible sites. Historically, timber harvests within the Ring of Fire planning area have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future, and adverse effects on paleontological resources would be localized and minor.

Leasable, Locatable, and Salable Minerals Effects on Paleontological Resources (Common to All)

Mining and oil and gas leasing may have adverse effects on known and undiscovered paleontological resources through vehicle traffic, use of explosives, and heavy equipment travel.

Off-Highway Vehicles Effects on Paleontological Resources (Common to All)

OHV use can disturb large areas of soil and vegetation, potentially exposing paleontological material or burials in areas where damage to the surface has already occurred (VanderHoek 2004). Areas of prolonged, high use can disturb ground surfaces, or expose paleontological resources.

Recreation Effects on Paleontological Resources (Common to All)

Recreational activities could adversely affect paleontological resources through the unintentional or intentional damage resulting from looting or vandalism.

4.3.1.9.2 Alternative A for Paleontological Resources

Leasable, Locatable, and Salable Minerals Effects on Paleontological Resources (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Effects could also be minimized on a case-by-case basis through stipulations contained within approved Plans of Operations. Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*.

Off-Highway Vehicles Effects on Paleontological Resources (Alternative A)

Under Alternative A, there are no OHV designations in place within the Ring of Fire planning area, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). As currently managed, OHV use is allowed on all terrain, including sensitive habitats such as near fish-bearing streams (a common location for paleontological resources). OHV use can disturb large areas of soil and vegetation, potentially exposing paleontological material or fossils in areas where damage to the surface has already occurred. OHV use throughout the majority of the planning area is dispersed and on a small scale, except for areas of high use such as the Knik River Valley.

Summary of Alternative A Effects on Paleontological Resources

The management actions proposed under Alternative A would have a variety of effects on visual resources occurring on BLM-managed lands. Management would maintain any effects on visual resources at their current expected levels, given that current management does not establish VRM classifications. As OHV use continues to go unrestricted, minimal adverse effects to BLM-managed visual resources may continue, primarily in areas of high use such as the Knik River. Potential mineral exploration and development, and the creation of new ROWs both have the potential to adversely affect visual resources, however any effects would likely be minimal based on the limited potential for mineral development on BLM-managed lands within the planning area (2,618 acres or less of surface disturbance). Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A may have localized, adverse effects on visual resources.

4.3.1.9.3 Alternative B for Paleontological Resources

Lands and Realty Effects on Paleontological Resources

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would become available for consideration for leasing and disposal. Because of the constraints currently in place under these withdrawals, relinquishment of the withdrawals could increase potential resource development, and adverse effects on paleontological resources. However, given the low potential for development, effects on paleontological resources would be minor.

Leasable, Locatable, and Salable Minerals Effects on Paleontological Resources (Alternative B)

Under this alternative, localized adverse effects to paleontological resources may occur (described in *Direct and Indirect Effects Common to All Alternatives*). Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Off-Highway Vehicles Effects on Paleontological Resources (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for the OHV closures, which would remain at Campbell Tract and restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). OHV use would continue across all types of terrain, including sensitive habitats such as near fish-bearing streams (a common location for paleontological resources). OHV use can disturb large areas of soil and vegetation, potentially exposing paleontological material or fossils in areas where damage to the surface has already occurred.

Summary of Alternative B Effects on Paleontological Resources

Effects to paleontological resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. Adverse effects from forestry (approximately 20 acres per year) and recreation use would likely be to small acreages and minor in scale. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, the RFDs (Appendix G) for oil and gas development, predict a total of 2,558 acres of potential disturbance. Up to 60 acres of surface disturbance is predicted through the development of locatable minerals. It is unlikely that any salable mineral extraction would occur on BLM-managed lands. All such development would be subject to ROPs, stipulations, and project-specific mitigation measures. Any adverse effects to paleontological resources from mineral development would be unlikely due to the limited potential for mineral development on BLM-managed lands within the planning area. By designating all BLM-managed lands as “open” to OHV use, adverse effects could result through damage to surface paleontological resources, especially in heavy use areas, such as the Knik River.

4.3.1.9.4 Alternative C for Paleontological Resources

Lands and Realty Effects on Paleontological Resources (Alternative C)

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA (Figure 2.3-4), the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect paleontological resources in these areas by providing further management protections through the development of specific implementation plans. Land acquisitions could result in increased accessibility and more opportunities for fossil discovery and documentation.

Leasable, Locatable, and Salable Minerals Effects on Paleontological Resources (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on paleontological resources. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Under Alternative C, there are also seasonal and NSO constraints outlined for the Palmer Hay Flats (Figure 2.3-5) and areas in the Cape Lieskof area of the Alaska Peninsula (Figure 2.3-9). However, in the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, known paleontological resources should maintain their current conditions and remain protected from future mineral exploration and development.

Off-Highway Vehicles Effects on Paleontological Resources (Alternative C)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to paleontological resources relative to the current level of effects. Areas of high OHV use, such as the Knik River, may experience the highest level of beneficial effects on paleontological resources, presuming that some occur within the proposed boundaries of the area.

Summary of Alternative C Effects on Paleontological Resources

Effects to paleontological resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. BLM would designate all lands as "limited" to OHV use, following ADNR's *Generally Allowed Uses on State Lands* (Appendix E), which could reduce any adverse effects to known paleontological resources occurring in high OHV-use areas such as the Knik River SRMA. Effects from forestry (approximately 20 acres per year), ROWs, mining, and oil and gas developments (2,558 acres of oil and gas potential disturbance,

up to 60 acres of locatable potential disturbance), and recreation use would occur on a very localized scale. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Paleontological resources would receive further levels of protection through the development of implementation plans and ROPs, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F).

4.3.1.9.5 Alternative D for Paleontological Resources

Lands and Realty Effects on Paleontological Resources (Alternative D)

Acquisitions – Under Alternative D, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis to further the objectives of the SMA. In addition, the Knik River SRMA, the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect paleontological resources within the SMAs by providing further management protections through the development of specific implementation plans. Land acquisitions could result in increased accessibility and more opportunities for fossil discovery and documentation.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under this alternative. Potential effects would be similar to Alternative B.

Leasable, Locatable, and Salable Minerals Effects on Paleontological Resources (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of cultural resources in those areas.

Off-Highway Vehicles Effects on Paleontological Resources (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to existing roads and trails to OHV use, IAPs would further modify the “limited” designation by opening some subareas for more intensive OHV use. Limiting use to existing roads and trails within the Ring of Fire planning area may reduce adverse effects to paleontological resources relative to the current level of effects. Areas of high OHV use, such as the Knik River SRMA, may experience the highest level of beneficial effects on paleontological resources if use is limited, presuming that some exist within its boundaries.

Summary of Alternative D Effects on Paleontological Resources

Effects to paleontological resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, which could reduce any adverse effects on paleontological resources occurring in high OHV-use areas such as the Knik River SRMA. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, effects from forestry (potentially on 20 acres per year), ROWs, mining, and oil and gas developments (2,558 acres of oil and gas potential disturbance, up to 60 acres of locatable potential disturbance), and recreation use would occur on a very localized scale. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Paleontological resources would receive further levels of protection through the development of implementation plans and ROPs and/or stipulations (Appendix D, Cultural 1-5), if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F).

4.3.1.10 Cultural Resources

4.3.1.10.1 Direct and Indirect Effects Common to All Alternatives for Cultural Resources

An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources under current federal and State regulations (e.g., Alaska Statute [AS] 41.35.010-41.35.240; National Historic Preservation Act [NHPA]; other regulations including Archaeological Resource Protection Act [ARPA], Native American Graves Protection and Repatriation Act [NAGPRA], Abandoned Shipwrecks Act; Executive Orders [EO] 12898, 13006, 13007, and 13287) would be conducted prior to any undertaking on a case-by-case basis.

Forestry Effects on Cultural Resources (Common to All)

Forest management and timber harvests may damage a variety of archaeological sites, including tree burials, culturally modified trees, and sites on the ground that could be effected by skidders, drag lines, controlled burns, and tree felling. Timber sales would require roads for access to the timber, potentially increasing access to previously inaccessible areas and the potential for damage or looting to formerly inaccessible sites. Historically, timber harvests within the Ring of Fire planning area have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future.

Leasable, Locatable, and Salable Minerals Effects on Cultural Resources (Common to All)

Mining and oil and gas leasing, including geophysical exploration, may have adverse effects on known or undiscovered archaeological and historical sites and burials through vehicle traffic, use of explosives, and heavy equipment travel. If disturbed, these resources could lose potential information, integrity, and cultural value. Federal regulations that address archaeological and historical resources require inventory, recordation, and evaluation in the area of potential effect as part of the approval process for any surface disturbing activity. If disturbance or destruction is not avoidable, sites would be managed to ensure against adverse effects through proper mitigation. Increases in industrial development could also cause Native people to stop using an area over time, resulting in a decreased connection to place. A sense of community connection to a place is one of the criteria necessary for a traditional cultural property to be eligible for the NRHP.

Off-Highway Vehicles Effects on Cultural Resources (Common to All)

OHV use can disturb large areas of soil and vegetation, potentially exposing archaeological material or burials in areas where damage to the surface has already occurred (VanderHoek 2004). Areas of prolonged, high use can disturb ground surfaces; or expose archaeological, ethnographic, or historical sites and burials.

Recreation Effects on Cultural Resources (Common to All)

Recreational activities could adversely affect cultural resources through the unintentional or intentional damage resulting from looting or vandalism. Increased recreational activity can adversely affect ethnographic resources. For example, Native people are less likely to go to an area they have historically used if it has become an increasingly popular recreation resource,

which could result in a decreased connection to a place over time. A sense of community connection to a place is one of the criteria necessary for a traditional cultural property to be eligible for the NRHP. In some environments, areas available for camps and cabins may also have archaeological or historical remains or ethnographic significance, particularly in places with limited availability of dry, elevated ground or some particular attractive characteristics (e.g., proximity to water, shelter from prevailing winds, cave or rock shelter).

4.3.1.10.2 Alternative A for Cultural Resources

Leasable, Locatable, and Salable Minerals Effects on Cultural Resources (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Effects could also be minimized on a case-by-case basis through stipulations contained within approved Plans of Operations. Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*.

Off-Highway Vehicles Effects on Cultural Resources (Alternative A)

Under Alternative A, there are no OHV designations in place within the Ring of Fire planning area, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). As currently managed, OHV use is allowed on all terrain, including sensitive habitats such as near fish-bearing streams (a common location for cultural resources). Continued surface damage resulting from OHV use could have adverse effects on cultural resources through the exposure or damage of these resources. Introduction of visual, atmospheric or audible elements that diminish the integrity of a property's significant features could also adversely affect the eligibility of cultural resources for inclusion on the NRHP. With the exception of high use areas such as the Knik River Valley, OHV use is generally in localized areas along the road system or in the vicinity of communities. Adverse effects on cultural resources would be localized in nature.

Summary of Alternative A Effects on Cultural Resources

Effects to cultural resources under Alternative A are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. Any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less), and the chance that any known cultural resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations. As OHV use remains unrestricted, adverse effects to cultural resources could result through damage to surface archaeological or cultural resources, especially in heavy use areas, such as the Knik River. Adverse effects from forestry and recreation use would likely be limited in extent.

4.3.1.10.3 Alternative B for Cultural Resources

Lands and Realty Effects on Cultural Resources (Alternative B)

Sales – Disposals of lands identified could result in a culturally significant place no longer being accessible, even though the parcels identified are relatively small within the overall planning area (Table 2.3-1).

Acquisitions – Acquisitions would be considered from willing landowners on a case-by-case basis. Land acquisitions could result in increased accessibility for the community for whom the place is culturally significant.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative B. Previously withdrawn lands that were not selected by the State or Native corporations would become available for consideration for leasing and disposal. Because of constraints currently in place under these withdrawals, revocation could increase potential resource development and adverse effects on cultural resources. However, given the low potential for mineral development, effects on cultural resources would be minor.

Leasable, Locatable, and Salable Minerals Effects on Cultural Resources (Alternative B)

Under this alternative, localized adverse effects to cultural resources may occur (described in *Direct and Indirect Effects Common to All Alternatives*). Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Off-Highway Vehicles Effects on Cultural Resources (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Adverse effects to cultural resources would be similar to Alternative A. OHV use would continue across all types of terrain, including sensitive habitats such as near fish-bearing streams (a common location for cultural resources). Continued surface damage resulting from OHV use could have adverse effects on cultural resources through the exposure or damage of these resources.

Visual

All BLM-managed lands would be designated as VRM Class IV, allowing major modifications to the existing character of the landscape, and the context of cultural resource sites. Potential effects would be mitigated by requirements for cultural resource surveys prior to development activities, and compliance with ROPs and stipulations.

Summary of Alternative B Effects on Cultural Resources

Effects to cultural resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road

network. However, an inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. Adverse effects from forestry and recreation use would likely be limited in extent. The disposal or acquisition of lands may adversely or beneficially affect culturally important places. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, any mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less), so the chance that any known cultural resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations, ROPs and stipulations. As OHV use remains unrestricted, adverse effects to cultural resources could result through damage to surface archaeological or cultural resources, especially in heavy use areas, such as the Knik River.

4.3.1.10.4 Alternative C for Cultural Resources

Lands and Realty Effects on Cultural Resources (Alternative C)

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA (Figure 2.3-4), the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect cultural resources in these areas by providing further management protections through the development of specific implementation plans. Acquiring lands could also result in increased accessibility for a community for whom the place is culturally significant.

Leasable, Locatable, and Salable Minerals Effects on Cultural Resources (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Any actions that limit the extent of surface disturbing activities would help minimize adverse effects on cultural resources. The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Under Alternative C, there are also seasonal and NSO constraints outlined for the Palmer Hay Flats (Figure 2.3-5) and areas in the Cape Lieskof area (Figure 2.3-9) of the Alaska Peninsula. However, in the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, cultural resources should maintain their current conditions and remain protected from future mineral exploration and development.

Off-Highway Vehicles Effects on Cultural Resources (Alternative C)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use to existing roads and trails within the Ring of Fire planning area may reduce adverse effects to cultural resources relative to the current level of effects. Areas of high OHV use, such as the Knik River, may experience the highest level of beneficial effects on cultural resources, presuming that some cultural resources occur within the proposed boundaries of the area.

Visual Effects on Cultural Resources (Alternative C)

The Neacola Mountains ACEC, the Halibut Cove Forest Study Area (Figure 2.4-5), and the Lake Carlanna Municipal Watershed (Figure 2.4-6) would be managed as VRM Class II. All other lands would be managed as VRM Class III (Figures 2.4-5 through 2.4-8). These class designations may beneficially affect the visual integrity of properties eligible for the NRHP.

Wild and Scenic Rivers Effects on Cultural Resources (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Cultural resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Cultural Resources

Effects to cultural resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. BLM would designate all lands

as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which could reduce any adverse effects to cultural resources occurring in high OHV-use areas such as the Knik River SRMA. Effects from forestry, ROWs, mining, and oil and gas developments, and recreation use would occur on a very localized scale, and would be subject to ROPs and stipulations. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Cultural resources would receive further levels of protection through the development of implementation plans, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Visual class designations would be made on all BLM-managed lands, a few of which would be managed under VRM Class II, maintaining the existing visual character around potential cultural resources in these areas.

4.3.1.10.5 Alternative D on Cultural Resources

Lands and Realty Effects on Cultural Resources (Alternative D)

Acquisitions – Under Alternative D, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. In addition, the Knik River SRMA, the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. Land acquisitions may have the potential to beneficially affect cultural resources in these areas by providing further management protections through the development of specific implementation plans. Acquiring lands could also result in increased accessibility for a community for whom the place is culturally significant.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under Alternative D. Potential effects on cultural resources would be similar to Alternative B and would be minor.

Leasable, Locatable, and Salable Minerals Effects on Cultural Resources (Alternative D)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D). Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of cultural resources in those areas.

Off-Highway Vehicles Effects on Cultural Resources (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Although all lands under this alternative would be designated as “limited” to OHV use, IAPs would further modify the “limited” designation by opening some subareas for more intensive OHV use. Limiting use within the Ring of Fire planning area may reduce adverse effects to cultural resources relative to the current level of effects. Areas of high OHV use, such as the

Knik River SRMA, may experience the highest level of beneficial effects on cultural resources if use is limited, presuming that there are cultural resources within its boundaries.

Visual Effects on Cultural Resources (Alternative D)

The Lake Carlanna Municipal Watershed (Figure 2.4-9), and the Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II. These class designations may beneficially affect the visual integrity of properties eligible for the NRHP. All other lands would be managed as VRM Class IV, which would allow modifications to the visual landscape that could dominate the view (Figure 2.4-7 through 2.4-9), and potentially adversely affect the character of cultural resource sites. Potential effects would be mitigated by requirements for cultural resource surveys prior to development activities, and compliance with ROPs and stipulations.

Summary of Alternative D Effects on Cultural Resources

Effects to cultural resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. BLM would designate all lands as “limited” to OHV use, which could reduce any adverse effects to cultural resources occurring in high OHV-use areas such as the Knik River SRMA. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, effects from forestry, ROWs, mining, and oil and gas development, and recreation use would occur on a very localized scale. Exploration and development activities would be subject to ROPs and/or stipulations (Appendix D, Cultural 1-5). SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Cultural resources would receive further levels of protection through the development of implementation plans, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Visual class designations would be made on all BLM-managed lands, a few of which would be managed under VRM Class II, maintaining the existing visual character around potential cultural resources in these areas.

4.3.2 Resource Uses

4.3.2.1 Resources with Effects Common to All Alternatives

4.3.2.1.1 Forestry

Some minimal forestry activity occurs generally within the Ring of Fire planning area each year. Historically, timber harvests have not exceeded 100,000 board feet annually, representing a disturbance of approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula.

Given the high percentage of lands selected by the State of Alaska and Native corporations, limited forest resources on BLM-owned lands, the relatively unconsolidated nature and small parcel size of BLM-managed lands, and the remote location of larger parcels, potential commercial harvest areas and high interest personal use areas have not been identified. Timber harvests on BLM-managed lands in the planning area are primarily salvage operations associated with other development activities. All forestry management practices would be conducted consistent with guidelines described in the ROPs (Appendix D). BLM will identify potential commercial harvest areas and high interest personal use areas. If any of these areas are identified within the SRMAs and ACEC, management will be consistent with the objectives of the SRMAs and ACEC (Appendix F).

4.3.2.1.2 Grazing

There are no authorized livestock or reindeer grazing operations or permits in the BLM Ring of Fire planning area, although unauthorized use may occur. There is currently limited demand for livestock forage and grazing privileges on BLM-administered land. Some inquiries have been made regarding short-term grazing by recreational and commercial interests in pursuit of hunting, fishing, and backcountry recreation that utilize saddle, pack, or draft animals. However, there has been no demand for commercial livestock or reindeer grazing operations in the last decade.

Livestock, reindeer, or saddle or pack animal grazing use would occur by permit only. Requests would be carefully considered, and grazing would not be permitted where it is incompatible with sensitive wildlife populations, habitats, and vegetation; or in areas of high erosion and slope instability. Grazing would be managed and permitted in a manner compatible with adjacent and federal landowners.

4.3.2.1.3 Renewable Energy

Potential renewable energy resources in the Ring of Fire planning area include wind, geothermal, hydroelectric, and solar power. While no management actions proposed in this plan are meant to exclude the use of sites for hydropower generation, there are no existing or proposed renewable energy program sites on BLM-managed lands in the planning area. Alaska is not included in an ongoing study to increase solar and wind energy systems on BLM land in other states (BLM 2005d). A hydroelectric power site could be reserved along the Chatachakna River in the future, however it is not proposed in this PRMP/FEIS.

No management actions specific to renewable energy were identified for the BLM Ring of Fire planning area. If areas were to be identified in the future, and fell within the boundaries of the SRMAs and ACEC, management will be consistent with the objectives of these areas (Appendix F).

4.3.2.2 Lands and Realty

4.3.2.2.1 Direct and Indirect Effects Common to All Alternatives for Lands and Realty

Wetlands-Riparian Effects on Lands and Realty (Common to All)

Management of wetlands and riparian areas could result in setbacks and other potential restrictions on lands and realty actions. Potential restrictions could include designation of limited development areas within leases, and rerouting of proposed ROWs or road easements.

Wildland Fire and Fuels Management Effects on Lands and Realty (Common to All)

Fire management under all alternatives would generally help protect land use authorizations by reducing fire loads and suppressing larger fires. In situations where fire is used to manipulate vegetative composition, or is otherwise used in fire management, there is a possibility that the fire could become wild and cause damage to above ground facilities and structures associated with land use authorizations. However, the unconsolidated nature and relatively small parcel size of BLM lands in the Ring of Fire planning area make the likelihood of such potential effects minimal.

Visual Resources Effects on Lands and Realty (Common to All)

VRM would effect land use authorizations such as ROWs, leases, and permits. Facilities, structures and linear features such as roads would need to meet the objectives for the particular VRM class in which the project was proposed, which could entail mitigation, relocation, or elimination of certain facilities resulting in additional time and costs in project development.

Cultural Resources Effects on Lands and Realty (Common to All)

The management of cultural resources could affect several aspects of the lands and realty program; including land use authorizations, land ownership adjustments, and the reservation or acquisition of legal and physical access to public lands. Lands and realty actions must avoid inadvertent damage to federal and non-federal cultural resources through compliance with Section 106 of the NHPA. Cultural resource inventories would need to be completed prior to federal lands and realty actions, and effects to important cultural resource sites would need to be avoided. Actions taken to avoid effects to important cultural sites could include rerouting a proposed ROW or road easement, or restructuring or abandoning a proposed land adjustment such as a land exchange or sale. The magnitude of potential effects would be site specific, but would not likely effect large areas of BLM managed lands, due to the location, scattered nature and relative small size of parcels in the planning area.

Paleontological Resources Effects on Lands and Realty (Common to All)

The effects on lands and realty from the management of paleontological resources would be very similar to those of cultural resources as described in the previous paragraph.

Forestry Effects on Lands and Realty (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road

construction activity. It is expected that a similar volume of harvest will occur in the foreseeable future. While no major road construction has occurred as a result of timber harvests, it is not inconceivable that short spur, or temporary roads could be constructed to access parcels of timber in the future. Activities associated with forestry could require leases for timber harvest and ancillary activities, and road construction could require short-term land authorizations for roads ROWs.

Given the relatively low value and limited demand for the timber in the Ring of Fire planning area, most of the timber harvested would come as an ancillary benefit from other construction projects such as ROW clearing or other permitted activities. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. Potential lands and realty effects would generally be beneficial but minor, given the small scale of historic timber operations.

Lands and Realty (Common to All)

Disposals – Lands disposed of or exchanged under the R&PP Act and FLPMA would continue to be considered on a case-by-case basis. An analysis of whether disposal of lands would be in the national interest and that lands would be better suited for ownership by another public or private entity would be conducted, along with an analysis associated with compliance with NEPA. Community interest in disposal of BLM lands under the R&PP process is likely to remain at current levels or increase after the adjudication of selected lands. Selected lands are ineligible for disposal without relinquishment by the selectee, and exchanges will be considered only after State and Native selections have been settled.

Withdrawals – Withdrawals, not including ANSCA 17(d)(1), are to be evaluated on a case-by-case at the request of the holding agency. If withdrawals remain valid, those parcels will continue to be withheld from other authorizations (BLM 2005q). However, some withdrawal orders would be revoked, when requested by the holding agency, at which time the parcel would be available to consider easements, leases, and permits/licenses for authorized actions. If a withdrawal order were revoked, other land authorizations would be considered by BLM. Effects to land authorizations from withdrawal evaluation would vary depending on which withdrawals are approved for conveyance, revoked, or relinquished, and which land authorizations will be allowed.

Access (ROWs and easements) – BLM will continue to manage conservation easements, as well as 17(b) easements that access public lands across Native lands. An effort will be made to transfer 17(b) easements that access NPS, USFS, and USFWS lands to the appropriate agency for management. There is no expected decrease in access currently provided by 17(b) easements. Road and utility easements associated with specific proposed activities will be considered on a case-by-case basis.

Hazardous Material Effects on Lands and Realty (Common to All)

Land Use authorizations for uses that would involve disposal of materials that could contaminate the land would not be issued, while projects involving storage of hazardous materials would be managed to limit possibility of contamination. Lands proposed for acquisition would need to be inventoried for the presence of hazardous materials. The presence of contaminants could lead to actions such as the modification or abandonment of an ownership adjustment proposal, or remediation in the form of clean-up and removal of the contaminants.

Leases, permits, and easements would include measures to prevent contamination through the application of ROPs and stipulations.

Leasable, Locatable, and Salable Minerals Effects on Lands and Realty (Common to All)

The management of leasable, locatable, and salable minerals would likely result in requests for land use authorizations such as ROWs and permits.

4.3.2.2.2 Alternative A for Lands and Realty

Leasable, Locatable, and Salable Minerals Effects on Lands and Realty (Alternative A)

Leasable Minerals – No BLM-managed lands are identified as open to fluid mineral leasing, except where existing use is already occurring. These closures would render any fluid leasables present as unrecoverable and other land authorizations could be considered for these lands. However, in cases where oil and gas is being extracted or may be extracted from BLM-managed lands by adjacent development activities, BLM may lease such lands, and any leases issued to address extraction would be subject to standard lease terms and ROPs. The Authorized Officer may add additional stipulations to the lease that are developed through further NEPA analysis, and as developed through consultation with other regulatory agencies.

Coal exploration and non-energy leasable mineral prospecting is currently authorized on unleased lands managed and wholly owned by BLM, and would be allowed on a case-by-case basis. Coal production and non-energy leasable mineral prospecting permits could result in permits for ROW and potential easements. However, the *Mineral Potential Report* (Appendix G) has indicated that RFD for minerals is relatively limited in extent, estimated at 2,558 acres, and potential effects on lands and realty would be minimal.

Locatable Minerals – Approximately 60 acres are currently open for locatable mineral entry. Development of locatable minerals would require Approved Plans of Operations, which would contain stipulations based on site-specific resource values and concerns. Some ANCSA 17(d)(1) lands that are currently closed to mineral entry and other uses would remain closed. Effects on lands and realty would be minimal.

Salable Minerals – Of the approximately 1.3 million acres of BLM managed lands within the Ring of Fire planning area, approximately 486,000 acres of unselected lands are available for sale of mineral resources. Within the Ring of Fire planning area, the majority of salable materials come from private lands in the Aleutian Chain and Southcentral regions. Additional demand for sand and gravel would be limited to localized areas. Development of salable minerals would require Approved Plans of Operations, which would contain stipulations based on site-specific resource values and concerns.

Off-Highway Vehicles Effects on Lands and Realty (Alternative A)

While there are no OHV designations within the Ring of Fire planning area, the current management situation allows OHV use on all BLM-managed lands, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). With regard to BLM managed lands in the planning area, OHV use is concentrated along the Knik River, and to a lesser extent in the Haines Block. Both of these areas have a significant amount of selected lands. Land authorizations such as easements, ROWs, natural resource exploration and development would not be effected by

OHV use. However, there are adverse effects on adjacent land uses, which are discussed under the OHV analysis.

Recreation Effects on Lands and Realty (Alternative A)

There are currently no SMAs within the Ring of Fire planning area that would affect lands and realty actions. Commercial helicopter tourism activities in the Haines Block would continue to require conditions and stipulations on permits and plans of operations.

Summary of Alternative A Effects on Lands and Realty

Under Alternative A, lands and realty authorizations would continue to occur on a case-by-case basis; no lands would be specifically identified for sale. The continuation of ANCSA 17(d)(1) withdrawals would have a moderate adverse cumulative effect on availability of public land for mineral use, although the potential for reasonably foreseeable mineral development is limited (2,618 acres or less). Access for OHV would remain undesignated for BLM managed lands, and activities within the Knik River area would contribute to adverse effects on habitat, adjacent land use, and public safety.

4.3.2.2.3 Alternative B for Lands and Realty

Visual Resources Effects on Lands and Realty (Alternative B)

Under Alternative B, all lands within the Ring of Fire planning area would be managed under VRM Class IV, which is the least restrictive classification. VRM classes will be considered in developing permit conditions for lands and realty authorizations, and activities could be subject to permit conditions that maintain VRM Class IV values, which allow major modifications to the landscape, and would have minimal effects on lands and realty actions.

Leasable, Locatable, and Salable Minerals Effects on Lands and Realty (Alternative B)

As ANCSA 17(d)(1) withdrawal orders are lifted, land open to potential mineral leasing would increase and some additional land use authorizations associated with increased resource exploration would be anticipated. However, the *Mineral Potential Report* has indicated that RFD for minerals is relatively small, primarily on existing mining claims, and that the likelihood of additional development is low (Appendix G).

Leasable Minerals – Of the approximately 1.3 million acres of BLM managed lands within the Ring of Fire planning area, approximately 486,000 acres of unselected lands would be open for fluid mineral leasing. Selected lands, where selections have been relinquished and revoked would also be open to fluid mineral leasing. Stipulations and required operating procedures described in Appendix D would apply to all lands open to oil and gas leasing. Due to the relatively small number of acres designated as having high mineral development potential on BLM-managed lands, effects on lands and realty actions would be minimal.

The potential effects related to other leasable minerals would be similar to Alternative A, with the exception of additional lands being made available to leasing from the rejection of ANCSA 17(d)(1) withdrawals. Coal exploration would continue to be authorized, on a case-by-case basis, however, coal exploration activities in open areas and non-energy leasable mineral prospecting in open areas, will be subject to BLM's stipulations and ROPs.

Locatable Minerals – By revoking ANCSA 17(d)(1) withdrawals, approximately 486,000 acres of unselected lands would be available for locatable mineral resource exploration. Lands and realty actions associated with easements, ROWs, and associated permits would increase. However, the *Mineral Potential Report* has indicated that RFD for minerals is relatively small, estimated at 60 acres, primarily on existing mining claims. Development of locatable minerals would require Approved Plans of Operations, which would contain stipulations and required operating procedures described in Appendix D.

Salable Minerals – The effects of salable minerals would be the same as discussed for Alternative A, with the addition that Approved Plans of Operations would contain stipulations and ROPs described in Appendix D.

Off-Highway Vehicles Effects on Lands and Realty (Alternative B)

Alternative B would designate all BLM-managed land in the Ring of Fire planning area open to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Effects would be the same as for Alternative A.

Recreation Effects on Lands and Realty (Alternative B)

No new SMAs would be designated under Alternative B. Effects would be the same as for Alternative A under which conditions and stipulations under permits are required.

Summary of Alternative B Effects on Lands and Realty

Under Alternative B, eight specific small parcels would be offered for sale (Table 2.3-1), and the revocation of ANCSA 17(d)(1) withdrawals could result in an increase in lands and realty authorizations. However, the potential for mineral development is considered low (2,618 acres or less).

All BLM managed lands in the planning area would be designated as open to OHV access, which is effectively similar to Alternative A. All lands within the Ring of Fire planning area would be managed under VRM Class IV, which is the least restrictive classification. No new SMAs would be designated.

4.3.2.2.4 Alternative C for Lands and Realty

Wildlife Effects on Lands and Realty (Alternative C)

Wildlife values would be further addressed in the development of special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC.

Visual Resources Effects on Lands and Realty (Alternative C)

Under Alternative C, the Neacola ACEC, Halibut Cove Forest Study Area (Figure 2.4-5), and the Lake Carlanna Municipal Watershed (Figure 2.4-5) would be managed as VRM Class II, and the Knik River SRMA would be managed as VRM Class IV (Figure 2.4-5). All other BLM lands with the planning area would be managed as VRM Class III. Maintenance of minimum VRM Class I or II could result in restrictions on permits, leases, ROWs and other lands and realty action. Depending on the location and proposed action, adverse effects would be minimal to moderate.

Leasable, Locatable, and Salable Minerals Effects on Lands and Realty (Alternative C)

Leasable Minerals – As ANCSA 17(d)(1) withdrawals would be maintained, the amount of unselected lands open to fluid and solid mineral leasing would be reduced compared to Alternative B. In addition, four specific areas on unselected lands and four areas on selected lands would be closed to fluid mineral leasing (see Table 2.3-2). In order to protect important wildlife habitat, NSO would be required on BLM managed lands within ¼ mile inland from the mean high tide in the Cape Lieskof area of the Alaska Peninsula (Figure 2.3-9). Similarly, no oil and gas exploration activity or road building would be allowed during two periods important to migratory birds in the Palmer Hay Flats (Figure 2.3-5). Provisions for leasing under situations of drainage would still apply, along with the application of ROPs and stipulations described in Appendix D. Potential effects on lands and realty actions would be similar to but less than Alternative B.

Locatable and Salable Minerals – With regard to locatable and salable minerals, less than 60 acres of locatable mineral development is expected, and salable mineral development is unlikely. The four areas listed in Table 2.3-3 would be closed to mineral entry, and ROPs and stipulations would be applied as described in Appendix D to approved Plans of Operation. Potential effects on lands and realty actions would be similar to, but less than Alternative B.

Off-Highway Vehicles Effects on Lands and Realty (Alternative C)

Alternative C would designate all BLM-managed land in the Ring of Fire planning area as limited to existing and designated trails, consistent with State regulations on generally allowed uses on State land. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Within the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA (Figure 2.3-4), and the proposed Mountains ACEC (Figure 2.3-3), limitations would be further refined to meet the objectives of the SRMAs and ACEC (Appendix F). Refinement would likely increase compatibility with adjacent land use and land use plans, resulting in moderate beneficial effects. Other lands and realty actions would not be affected.

Recreation Effects on Lands and Realty (Alternative C)

Special management designations are given to the Knik River (SRMA), Haines Block (SRMA), and Neacola Mountains (ACEC), and management objectives are described in Appendix F. Management for recreation values would decrease the amount of development authorizations that would be allowed for those areas, but could reserve certain values for other land uses.

Wild and Scenic Rivers Effects on Lands and Realty (Alternative C)

Under Alternative C, segments of 14 rivers were identified as eligible, but not suitable, for WSR designation. To the extent that some of these river segments are located within the Knik River and Haines Block would be identified as SRMAs for recreation, and the Neacola Mountains as an ACEC, the ORVs for which these river segments have been designated would be addressed during the preparation of special management plans. Identified ORVs for river segments outside of identified SMAs would be taken into consideration when reviewing proposed actions that might have an effect on the ORV. Addressing these values through conditions and stipulations on lands and realty actions may restrict some land authorizations; effects would be localized.

Summary of Alternative C Effects on Lands and Realty

Under Alternative C, no lands would be identified for sale within the planning area, and effects would be similar to Alternative A. Emphasis would be placed on acquisition of land from willing landowners within the Knik River SRMA, the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT. ANCSA 17(d)(1) withdrawals would remain under Alternative C; until conveyance of selected land is settled, the amount of unselected lands open to fluid and solid mineral leasing would be reduced compared to Alternative B. In addition, four specific areas on unselected lands and four areas on selected lands would be closed to fluid mineral leasing (Table 2.3-2).

All BLM-managed land in the Ring of Fire planning area would be limited for OHV access to existing and designated trails, consistent with State regulations on *Generally Allowed Uses on State Lands* (Appendix E). Within the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC, limitations would be further refined to meet the objectives of the SMAs (Appendix F). The Neacola ACEC, Halibut Cove Forest Study Area and Lake Carlanna Municipal Watershed would be managed as VRM Class II, and the Knik River SRMA as VRM Class IV. All other BLM lands with the planning area would be managed as VRM Class III. Wildlife values would be further addressed in the development of special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC.

4.3.2.2.5 Alternative D for Lands and Realty

Wildlife Effects on Lands and Realty (Alternative D)

Effects would be the same as discussed under Alternative C.

Visual Resources Effects on Lands and Realty (Alternative D)

Under Alternative D, the Lake Carlanna Municipal Watershed (Figure 2.4-9) and Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II. This is a relatively restrictive class, and appropriate stipulations and conditions would be placed on lands and realty actions. The Neacola Mountains ACEC would be managed as VRM Class II, with appropriate stipulations and conditions placed on lands and realty actions. The rest of the planning area would be managed as VRM Class IV. Effects to lands and realty authorizations would generally be localized and minor.

Leasable, Locatable, and Salable Minerals Effects on Lands and Realty (Alternative D)

Leasable Minerals – Effects on leasable minerals would be similar to Alternative B, with the recommendation to revoke of ANCSA 17(d)(1) withdrawals. For fluid minerals, two areas would remain closed to entry (Lake Carlanna Municipal Watershed and Halibut Cove Forest Study Area). Similar to Alternative B, stipulations and ROPs listed in Appendix D would apply. Similar to Alternative C, measures to protect wildlife habitat such as NSOs and seasonal closures would apply to specific areas on the Alaska Peninsula and the Palmer Hay Flats. Potential effects on lands and realty actions would be localized, and in the case of Palmer Hay Flats, short term in nature (seasonal closure), and would therefore be minor.

As with Alternative B, coal exploration would continue to be authorized, on a case-by-case basis; however, coal exploration activities in open areas and non-energy leasable mineral prospecting in open areas, will be subject to the ROPs presented in Appendix D.

Locatable and Salable Minerals – By recommending the revocation of ANCSA 17(d)(1) withdrawals, locatable and salable minerals exploration and development, easements, ROWs, and associated permits would have the potential to increase. Activities would be subject to the stipulations and ROPs presented in Appendix D. However, the Lake Carlanna Municipal Watershed and Halibut Cove Forest Study Area would remain closed to mineral entry. Given the relatively low potential for mineral development, effects on lands and realty actions would be minor.

Off-Highway Vehicles Effects on Lands and Realty (Alternative D)

All lands in the Ring of Fire planning area would be designated as limited to existing roads and trails to OHV use, with additional direction to be developed under special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Effects would be minor, similar to Alternative B.

Recreation Effects on Lands and Realty (Alternative D)

The effects would be the same as discussed under Alternative C.

Summary of Alternative D Effects on Lands and Realty

A total of eight small parcels have been identified for sale in the planning area, totalling approximately eight acres (Table 2.3-1). Revocation of ANCSA 17(d)(1) withdrawals could result in an increase in lands and realty authorizations, although specific areas would remain closed to mineral entry. However, the potential for mineral development is considered low (2,618 acres or less). The Mountain Goat Monitoring and Control Area within the Haines Block SRMA would be identified as an avoidance area for issuance of ROW authorizations. All lands in the Ring of Fire planning area would be designated as limited to existing roads and trails to OHV use, with additional direction to be developed under implementation plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC. The Lake Carlanna Municipal Watershed and Halibut Cove Forest Study Area would be managed as VRM Class II, the Neacola Mountains ACEC would be managed as VRM Class II, and the rest of the planning area would be managed as VRM Class IV. Wildlife values would be further addressed in the development of special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC.

4.3.2.3 Leasable Minerals

Under certain alternatives, leasable minerals such as oil and gas, CBNG, coal, and geothermal resources would be made available for development over the next 10 to 15 years, subject to BLM lease stipulations and ROPs (Appendix D), unless withdrawal or other administrative action is justified. The following sections describe the effects of these activities on the resource itself. Effects on other resources from these activities are described in the appropriate resource sections.

4.3.2.3.1 Direct and Indirect Effects Common to All Alternatives for Leasable Minerals

The management alternatives include restrictions on fluid mineral resource development as a result of conflicts with environmentally related surface values, which can result in effects to the use of the resources while providing additional protection of the environment. These restrictions effect development by increasing the costs of development activities. Where incremental costs result in a reduced return on investment below an acceptable level, the leaseholder may choose not to proceed with the development. This would result in a reduced production of oil and gas, lower royalty and tax payments, and decreased spending with contractors and vendors, such as drilling and service companies. Mitigations could result in non-environmental effects on the resource users, including decreased profit and reduced interest in developing other economically marginal resources within the Ring of Fire planning area.

The RFD for leasable minerals indicates high development potential for oil and gas, and moderate development potential for CBNG, which is limited to the Cook Inlet Oil and Gas Basin. These fluid minerals are considered to have low development potential in other regions of the Ring of Fire planning area due to inaccessibility, lack of infrastructure, and past exploration history. Because no foreseeable actions are anticipated for these resources in the Alaska Peninsula/Aleutian Chain, Kodiak, and Southeast regions, there would be no effect on the environment in these regions under any of the alternatives. The following discussion of direct and indirect effects pertains to the Southcentral region only.

4.3.2.3.2 Alternative A for Leasable Minerals

BLM-managed lands currently closed to leasing would remain closed under this alternative, with the exception of lands being drained of oil and gas from adjacent development, in which case BLM may lease such lands. Under current circumstances, no federal oil and gas, including CBNG would be extracted except from the existing federal leases in established oil and gas fields.

Under Alternative A, ANCSA 17(d)(1) withdrawals would be retained, and would remain closed to certain types of mineral entry. Areas where energy and mineral development are prohibited because of non-discretionary closures could contain resources that cannot be developed regardless of the market for the commodity or interest in development. No associated income or related economic activity could be realized from these resources, and the lost opportunity for development represents an unknown effect to the resource users. However, mineral potential as identified in Appendix G is relatively limited.

Summary of Alternative A Effects on Leasable Minerals

Under this alternative, leasable mineral development is unlikely because no lands are identified as open. The only potential for development would be in the event of drainage.

4.3.2.3.3 Alternative B for Leasable Minerals

Lands and Realty Effects on Leasable Minerals (Alternative B)

Under Alternative B, BLM would recommend revocation of ANCSA 17(d)(1) withdrawals and allow mineral leasing on these lands retained in federal ownership. All unselected lands (486,000 acres) and any selected lands whose selection is revoked would be open for fluid mineral leasing.

New oil and gas, and CBNG development under Alternative B, as well as continued oil and gas production at existing fields with federal leases, would result in reduction of total fluid mineral reserves, since it is a non-renewable resource. Implementation of ROPs and stipulations (Appendix D) could result in some additional restrictions on exploration and development of leasable minerals.

Visual Effects on Leasable Minerals (Alternative B)

Under this alternative, all lands within the Ring of Fire planning area would be managed as VRM Class IV. This level of management provides for actions that would make major modifications to the existing character of the landscape. These restrictions are expected to have negligible effects on leasable mineral development and exploration.

Summary of Alternative B Effects on Leasable Minerals

Under this alternative, ANCSA 17(d)(1) withdrawals would be recommended for revocation, and some additional lands would be open to mineral exploration. However, the potential for mineral development is limited given the small number of acres designated as having high development potential on BLM-managed lands (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. VRM Class IV management would be prescribed for all lands, and would have minimal adverse effects to development practices.

4.3.2.3.4 Alternative C for Leasable Minerals

Lands and Realty Effects on Leasable Minerals (Alternative C)

Under Alternative C, ANCSA 17(d)(1) withdrawals would be retained, and withdrawn from mineral leasing. Over 241,000 acres of unselected lands and 387,000 acres whose selection may be relinquished or revoked are open for fluid mineral leasing. Effects from reduction of leasable mineral reserves, existing field operations and potential geophysical exploration under Alternative C, would be less than described for Alternative B.

Visual Effects on Leasable Minerals (Alternative C)

Changes to the characteristic landscape should be very low, and not attract attention. The Neacola Mountains ACEC (Figure 2.3-3), and the Halibut Cove Forest Study Area (Figure 2.3-1) (both in the Southcentral region) would be managed as VRM Class II. All other lands would be managed as VRM Class III (Figure 2.4-5). There are currently no VRM Classes established within the Ring of Fire planning area. VRM Class I and II management would result in some restrictions on development activities, including minerals. Any ROPs, stipulations, or permit conditions for mineral exploration and development in these identified areas would be more restrictive than current conditions (Appendix D).

Wild and Scenic Rivers Effects on Leasable Minerals (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Leasable mineral potential within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Leasable Minerals

Under this alternative, mineral development is unlikely due to the lack of high development potential areas on BLM unencumbered lands (Appendix G), as well as fewer acreages available for leasing from discretionary closures. ANCSA 17(d)(1) withdrawals would be retained, and some small areas would be closed to mineral development (Table 2.3-2). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. Designation of the Haines Block, Knik River, and Neacola Mountains SMAs could result in additional restrictions on mineral development within those areas. VRM Classes would be recommended for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas, thus making development all the less likely.

4.3.2.3.5 Alternative D for Leasable Minerals

Lands and Realty Effects on Leasable Minerals (Alternative D)

Fluid mineral leasing under Alternative D would be similar to Alternative B; ANCSA 17(d)(1) withdrawals would be revoked. All unselected lands (486,000 acres) and any selected lands (798,000 acres) whose selection is relinquished or revoked would be open for fluid mineral

leasing. Of specific sensitive lands closed to mineral leasing under Alternative D, none are located within Cook Inlet Basin – an area designated as having high development potential for oil and gas, and moderate development potential for CBNG. Thus, effects from leasable mineral activities under Alternative D would be the same as those described for Alternative B.

Visual Effects on Leasable Minerals (Alternative D)

The Halibut Cove Forest Study Area would be managed as VRM Class II within the Southcentral region. The proposed Neacola Mountains ACEC would be managed as VRM Class II. All other lands would be managed as VRM Class IV (Figure 2.4-8). There are currently no VRM Classes established within the Ring of Fire planning area. Any ROPs, stipulations, or permit conditions for mineral exploration and development in these identified areas would be more restrictive than current conditions (Appendix D).

Summary for Alternative D on Leasable Minerals

Under this alternative, ANCSA 17(d)(1) withdrawals would be revoked, and some additional lands would be open to mineral exploration. However, mineral development is unlikely due to low mineral development potential (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. Designation of the Haines Block, Knik River, and Neacola Mountains SMAs could result in additional restrictions on mineral development within those areas. VRM Classes would be designated for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

4.3.2.4 Locatable and Salable Minerals

Locatable Minerals

While locatable minerals occur throughout most areas of the Ring of Fire planning area, only certain types of minerals and certain regions within the Ring of Fire are expected to have exploration and/or development potential the next 10 to 15 years. Exploration and development of locatable minerals is anticipated to occur in the Alaska Peninsula, southcentral Alaska, and southeast Alaska regions as described in the RFD developed by BLM (2005o) for locatable minerals (attached to Appendix G, Mineral Potential Report). The RFD predicts activity based on mineral deposit models, past and present exploration interest, and accessibility. While locatable minerals may be present in other areas (Aleutian Chain, Kodiak), they are considered uneconomic to explore and develop due to inaccessibility, deposit size, and projected industry interest. Thus, no foreseeable actions are anticipated for locatable minerals in the Aleutian Chain or Kodiak regions for the next 10 to 15 years.

Salable Minerals

The *Mineral Potential Report* and RFD address four types of salable minerals with a history of exploration and/or development in the Ring of Fire planning area: aggregate (sand and gravel), building stone, clay, and pumice. The effects analysis assumes that the demand for gravel will increase over the next 10 to 15 years as road maintenance and construction continue on State highways, State lands, Native corporation lands, and private lands. Little or no foreseeable development potential is predicted for clay and pumice, due to lack of markets and great distances to markets for these materials (BLM 2005o).

4.3.2.4.1 Direct and Indirect Effects Common to All Alternatives for Locatable and Salable Minerals

The RFD for locatable minerals indicates exploration and/or development potential in three regions of the Ring of Fire planning area: Alaska Peninsula, Southcentral, and Southeast. These minerals are considered to have low potential in the Aleutian Chain and Kodiak regions due to inaccessibility, mineral deposit size or type, and economic viability. Because no foreseeable actions are anticipated for these resources in the Aleutian Chain or Kodiak regions, there would be no effect on the environment under any of the alternatives.

Alaska Peninsula/Aleutian Chain Region

Five mineral deposit sites were identified in the RFD (Appendix G) on BLM-managed lands within the Alaska Peninsula that could be explored over the next 10 to 15 years. Mine development on one of these sites could occur in approximately 15 years (BLM 2005o).

Southcentral Region

Continued operations at an existing mine in the Girdwood area are anticipated to reduce the total remaining locatable mineral reserves in the region.

Southeast Region

A number of placer and lode deposits could be explored on BLM-managed lands in the Southeast region over the next 10 to 15 years. Of the existing inactive placer operations

currently located on BLM-managed lands, only one, located in the Porcupine area near Klukwan, is projected to have any activity during this timeframe.

4.3.2.4.2 Alternative A for Locatable and Salable Minerals

Lands and Realty Effects on Locatable and Salable Minerals (Alternative A)

Under Alternative A, most BLM-managed lands are currently closed to locatable mineral entry because of ANCSA 17(d)(1) withdrawals or State- or Native-selections, and would remain closed for the next 10 to 15 years. Thus, the total projected surface disturbance under Alternative A would be far less than that described in the RFD. As described below, current locatable mineral activity that would continue under Alternative A is located only in the Southcentral and Southeast regions.

BLM-administered surface and split-estate lands are currently available for exploration and development of salable minerals, and would continue to be available throughout the next 10 to 15 years under Alternative A. There are currently no known salable mineral activities on BLM-managed lands within the Ring of Fire planning area; however, because the demand for aggregate for road construction and maintenance is expected to increase over the next 10 to 15 years due to RFFAs (Section 4.4.2), there may be future interest in BLM-managed lands located near certain areas of potential high aggregate occurrence as described below.

One existing mine on BLM-managed land in the Southcentral region, located in the Girdwood area, is projected to operate under Alternative A, and would slightly reduce the total locatable mineral reserves in the region under Alternative A.

A number of inactive placer operations and lode prospects are currently located on State- or Native-selected lands or split-estate lands (State land with federal subsurface estate) in the Southeast region. Of these, only one of the placer mines, located in the Porcupine area near Klukwan, has had any active mining in the recent past and is likely to continue under Alternative A. If so, these activities would slightly reduce the total locatable mineral reserves in the region under Alternative A.

Summary of Alternative A Effects on Locatable and Salable Minerals

Existing locatable mineral activities that would continue under Alternative A would slightly reduce overall locatable mineral reserves. ANCSA 17(d)(1) withdrawals would remain in place, and most BLM-managed lands would remain closed to locatable mineral entry.

4.3.2.4.3 Alternative B for Locatable and Salable Minerals

Lands and Realty Effects on Locatable and Salable Minerals (Alternative B)

Under Alternative B, BLM would recommend revocation of all ANCSA 17(d)(1) withdrawals to allow locatable mineral leasing on lands retained in federal ownership, subject to 43 CFR 3809 regulations and BLM Alaska's stipulations and ROPs (Appendix D).

BLM-administered surface and split-estate lands are currently available for exploration and development of salable minerals, and would continue to be available throughout the next 10 to 15 years under Alternative B. The effects of salable activities within each region would be the same as those described under Alternative A.

Visual Effects on Locatable and Salable Minerals (Alternative B)

Under this alternative, all lands within the Ring of Fire planning area would be managed as VRM Class IV (Figure 2.4-1 through 2.4-3). This level of management provides for actions that would make major modifications to the existing character of the landscape. Change to the characteristic landscape can be high, and can dominate the view, becoming the major focus of the viewer. Stipulations and ROPs outlined to protect visual resources under this alternative would not be as stringent as under other alternatives.

Summary of Alternative B Effects on Locatable and Salable Minerals

Locatable mineral activities would reduce overall locatable mineral reserves in the Ring of Fire planning area, although the amount of mineral development is projected to continue at relatively low current levels. Salable mineral effects under Alternative B would be the same as Alternative A. VRM Class IV management would be prescribed for all lands, and would have minimal adverse effects on development practices.

4.3.2.4.4 Alternative C for Locatable and Salable Minerals

Lands and Realty Effects on Locatable and Salable Minerals (Alternative C)

Under Alternative C, ANCSA 17(d)(1) withdrawals would be retained, and current locatable mineral activity and reclamation on existing sites would continue as described under Alternative A. Existing locatable mineral activities that would continue under Alternative C would slightly reduce overall locatable mineral reserves.

There would be no effect on salable mineral activities, and no reduction in salable mineral reserves from these activities.

Visual Effects on Locatable and Salable Minerals (Alternative C)

Changes to the characteristic landscape should be very low, and not attract attention. The Neacola Mountains ACEC, the Halibut Cove Forest Study Area (Figure 2.4-5), and the Lake Carlanna Municipal Watershed (Figure 2.4-6) would be managed as VRM Class II. All other lands would be managed as VRM Class III. There are currently no VRM Classes established within the Ring of Fire planning area. Any ROPs, stipulations, or permit conditions for mineral exploration and development in these identified areas would be more restrictive than current conditions (Appendix D).

Wild and Scenic Rivers Effects on Locatable and Salable Minerals (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)

- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Locatable and salable mineral potential within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Locatable and Salable Minerals

Under this alternative, mineral development is unlikely due to land status and mineral potential (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). VRM Classes would be recommended for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

4.3.2.4.5 Alternative D for Locatable and Salable Minerals

Lands and Realty Effects on Locatable and Salable Minerals (Alternative D)

Under Alternative D, ANCSA 17(d)(1) withdrawals would be recommended for revocation. Locatable mineral activities under Alternative D would reduce overall locatable mineral reserves in the Ring of Fire planning area.

Salable minerals effects under Alternative D would be the same as Alternative A.

Visual Effects on Locatable and Salable Minerals (Alternative D)

The Lake Carlanna Municipal Watershed (Figure 2.4-9), and the Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II. The Neacola Mountains ACEC would be managed as VRM Class II (Figure 2.4-10). All other lands would be managed as VRM Class IV (Figures 2.4-7 through 2.4-9). There are currently no VRM Classes established within the Ring of Fire planning area. Any ROPs, stipulations, or permit conditions for mineral exploration and development in these identified areas would be more restrictive than current conditions.

Summary for Alternative D on Locatable and Salable Minerals

Under this alternative, mineral development is unlikely due to land status and mineral potential (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). VRM classes would be designated for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

4.3.2.5 Off-Highway Vehicles

4.3.2.5.1 Direct and Indirect Effects Common to All Alternatives for Off-Highway Vehicles

Wildlife Effects on Off-Highway Vehicles (Common to All)

Under all alternatives, critical habitat for listed species across Alaska has been designated for USFWS and NMFS T&E species. Critical habitat designations may include additional seasonal or year-round stipulations limiting the amount of OHV use in these areas. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, it is dependent upon the purpose and function of the critical habitat, and the action resulting in adverse destruction or modification.

Forestry Effects on Off-Highway Vehicles (Common to All)

Some minimal forestry activity occurs generally within the Ring of Fire planning area each year. Within this plan, BLM would identify potential commercial harvest areas and high interest personal use areas. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. Temporary roads or short access roads for small timber operations may provide new access for OHV use, even though it would be on an extremely localized scale.

Lands and Realty Effects on Off-Highway Vehicles (Common to All)

The conveyance of BLM-managed lands removes the BLM policies that currently provide no restrictions on OHV use. OHV activity would then be subject to other agency policies and restrictions. BLM is working to complete the conveyance of Native- and State-selected lands by 2009. Once these lands are conveyed, the entity would own both the surface and subsurface mineral rights, unless otherwise stipulated. The management policies of the new landowner may either increase or decrease restrictions on OHV use.

4.3.2.5.2 Alternative A for Off-Highway Vehicles

Wildlife Effects on Off-Highway Vehicles (Alternative A)

Compliance, monitoring, and mitigation requirements would continue to be determined on a case-by-case basis. Permits or other wildlife management guidelines may contain seasonal or year-round stipulations limiting the amount of OHV use in certain areas.

Lands and Realty Effects on Off-Highway Vehicles (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may result in a minimal beneficial effect, on a very localized scale given the past acquisition trends of BLM, by increasing the amount of land available for unrestricted OHV use.

Summary of Alternative A Effects on Off-Highway Vehicles

Management proposed under Alternative A would maintain any effects on OHV use at their current levels. There are no OHV designations in place within the Ring of Fire planning area at this time, and use is allowed on all types of terrain. Through the acquisition of lands and easements, more lands may become available for OHV use, though these actions are not common within BLM. Management guidelines or stipulations related to fish and aquatic habitat, wetlands and riparian vegetation, and wildlife may have limitations on OHV use in certain areas. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative A would have minimal effects on OHV use and effects would be on a very localized scale.

4.3.2.5.3 Alternative B for Off-Highway Vehicles

Wildlife Effects on Off-Highway Vehicles (Alternative B)

Compliance, monitoring, and mitigation requirements would continue to be determined on a case-by-case basis. Permits or other wildlife management guidelines may contain seasonal or year-round stipulations limiting the amount of OHV use in certain areas.

Lands and Realty Effects on Off-Highway Vehicles (Alternative B)

Acquisitions – The acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may produce a minimal beneficial effect on a very localized scale given the past acquisition trends of BLM.

Leasable, Locatable, and Salable Minerals Effects on Off-Highway Vehicles (Alternative B)

Under this alternative, localized adverse effects to OHV use may occur. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

Summary of Alternative B Effects on Off-Highway Vehicles

Effects on OHV use from future management under Alternative B would most likely occur along the existing road network, and would primarily be limited to a small portion of BLM-managed lands. Lands would be designated as “open” to OHV use on all lands within the Ring of Fire planning area. Effects from forestry (less than 20 acres per year), ROWs, mining, and oil and gas developments would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative B would have minimal effects on OHV use and effects would be on a very localized scale.

4.3.2.5.4 Alternative C for Off-Highway Vehicles

Visual Effects on Off-Highway Vehicles (Alternative C)

The Neacola Mountains ACEC (Figure 2.4-5), the Lake Carlanna Municipal Watershed (Figure 2.4-6), and the Halibut Cove Forest Study Area (Figure 2.4-5) would be managed as VRM Class II. All other BLM-managed lands would be designated VRM Class III. These class designations may have effects on levels of OHV use due to the way that some large, braided trails affect the visual landscape in areas of high use such as the Knik River (Figure 2.4-5).

Lands and Realty Effects on Off-Highway Vehicles (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Management guidance for these areas may contain increased restrictions for OHV use.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may produce a minimal beneficial effect by increasing the amount of land available for OHV use. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. While land acquisitions may be seen as providing more areas for OHV use, the implementation plans that would be developed for these areas may have increased levels of restrictions for OHV use.

Leasable, Locatable, and Salable Minerals Effects on Off-Highway Vehicles (Alternative C)

The level of development potential, and overall effects associated with the development of leasable, locatable, and salable minerals would be similar to that of Alternative B. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

The following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-2)
- Halibut Cove Forest Study Area (Figure 2.3-1)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Through increased levels of planning or permitting efforts in these areas, the amount of land previously available to unrestricted OHV use may decrease. Under Alternative C, there are also seasonal and NSO constraints outlined for the Palmer Hay Flats (Figure 2.3-5) and areas in the Cape Lieskof region (Figure 2.3-9) of the Alaska Peninsula. Through the ROPs and permitting actions, as mentioned earlier, restrictions on OHV use in these areas may increase.

Recreation Effects on Off-Highway Vehicles (Alternative C)

Under Alternative C, SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection through the development of implementation plans in these areas and would be managed to meet the objectives of the specific SMAs (Appendix F). These step-down plans may contain increased guidelines and restrictions regarding recreational OHV use, especially in areas of high use, such as the Knik River area.

Wild and Scenic Rivers Effects on Off-Highway Vehicles (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Off-highway vehicle use within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Off-Highway Vehicles

Effects on OHV use from future management under Alternative C are likely to be minor in scale, or concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the recreation setting in high OHV-use areas such as the proposed Knik River SRMA. Effects from forestry, ROWs, mining, and oil and gas developments, would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). All of these actions may have some minor adverse effects on OHV use on BLM-managed lands, relative to the current management actions, by decreasing the amount of lands available for OHV use, or increasing restrictions.

4.3.2.5.5 Alternative D for Off-Highway Vehicles

Lands and Realty Effects on Off-Highway Vehicles (Alternative D)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA (Figure 2.3-4) would be identified as an avoidance area. Management guidance for this area may contain increased restrictions for OHV use in order to decrease conflicts between wildlife and OHVs.

Acquisitions – Acquisitions of lands and easements would be handled the same as described under Alternative C. Land and easement acquisitions may produce a minimal beneficial effect by increasing the amount of land available for unrestricted OHV use. In addition, the Knik River SRMA (Figure 2.3-5), the Haines Block SRMA, the Neacola Mountains ACEC (Figure 2.3-3), and the Iditarod NHT would be emphasis areas for land acquisitions. While land acquisitions may be seen as providing more areas for OHV use, the implementation plans that would be developed for these areas may have increased levels of restrictions for OHV use.

Leasable, Locatable, and Salable Minerals Effects on Off-Highway Vehicles (Alternative D)

Under Alternative D, effects would be the same as discussed under Alternative C, except only the Lake Carlanna Municipal Watershed (Figure 2.3-2) and the Halibut Cove Forest Study Area (Figure 2.3-1) would be closed to mineral entry. Any OHV use occurring on those lands would be allowed to continue at current levels.

Recreation Effects on Off-Highway Vehicles (Alternative D)

Management actions proposed under Alternative D are the same as those described under Alternative C. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). These step-down plans may contain increased guidelines and restrictions regarding recreational OHV use, especially in areas of high use, such as the Knik River.

Summary of Alternative D Effects on Off-Highway Vehicles

Effects to OHV use from future management under Alternative D are likely to be limited in scale, and concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the recreation setting in high OHV-use areas such as the proposed Knik River SRMA. Effects from forestry (approximately 20 acres per year), ROWs, mining, and oil and gas developments would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). SRMA implementation plans for the Knik River could result in areas specifically being designated as open, limited, or closed to OHV use. All of these actions may have adverse effects on OHV use on BLM-managed lands, relative to the current management actions, by decreasing the amount of lands available for OHV use, or increasing restrictions.

4.3.2.6 Recreation

4.3.2.6.1 Direct and Indirect Effects Common to All Alternatives for Recreation

Appendix H and Figures 3.6-1 through 3.6-3 (Appendix A) show how lands within the Ring of Fire planning area have been classified using the Recreation Opportunity Spectrum (ROS). Lands that were not originally classified through the report contained in Appendix H have been designated as semi-primitive motorized.

Wildlife Effects on Recreation (Common to All)

Within the Haines Block, operating conditions on the permits that are issued are in place to help mitigate against potential adverse effects to the mountain goat populations in the area. Preventing further disturbances to these populations may result in moderate, seasonal adverse effects on commercial recreation in this area.

Forestry Effects on Recreation (Common to All)

If timber harvest should occur, the construction of timber access roads, and subsequent trail development may alter access to certain areas for recreation use, recreation settings, and availability of recreation resources. However, if any of these areas were identified within proposed SMAs, management would be consistent with the objectives of the SMAs (Appendix F).

Lands and Realty Effects on Recreation (Common to All)

Land disposals to the State or Native corporations may possibly affect availability of some scattered parcels for recreation use (refer to Figures 1.2-2 through 1.2-4 for an illustration of current land status within the Ring of Fire planning area).

4.3.2.6.2 Alternative A for Recreation

Lands and Realty Effects on Recreation (Alternative A)

Acquisitions – Under Alternative A, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may produce a minimal beneficial effect by potentially increasing the amount of land available for recreation use.

Off-Highway Vehicle Effects on Recreation (Alternative A)

OHV use would remain unrestricted on BLM-managed lands within the planning area. Some conflicts may occur between non-motorized recreation users and OHV users in areas of high use such as the Knik River Valley. Adverse effects would be minimal, localized and short-term in nature.

Summary of Alternative A Effects on Recreation

Management proposed under Alternative A would maintain any effects on recreation at their current levels. Campbell Tract is the only SMA currently identified within the Ring of Fire planning area. Through the acquisition of lands and easements, a small amount of lands may become available for recreation use. Commercial recreation activity is currently limited by

permit. Some conflicts between motorized and non-motorized recreation users may occur in the Knik River Valley. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative A may have minor effects on recreation.

4.3.2.6.3 Alternative B for Recreation

Wildlife Effects on Recreation (Alternative B)

Compliance, monitoring, and mitigation requirements would continue to be determined on a case-by-case basis. Permits or other wildlife management guidelines may contain seasonal or year-round stipulations limiting recreation use in certain areas such as the Haines Block, where use could conflict with wildlife management objectives.

Lands and Realty Effects on Recreation (Alternative B)

Acquisitions – Under Alternative B, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may produce a minimal beneficial effect by potentially increasing the amount of land available for recreation use.

Leasable, Locatable, and Salable Minerals Effects on Recreation (Alternative B)

All unselected lands (486,000 acres) and any selected lands (798,000 acres) whose selections are relinquished or revoked are open for fluid mineral leasing and locatable mineral leasing and entry under this alternative. Areas that are already developed for mineral extraction may have restrictions within their Plans of Operations that may restrict recreation. Potential surface disturbance resulting from projected leasable mineral activities may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D), which may also restrict recreation access to certain areas, alter recreation settings, and change the availability of recreation resources to the public.

Through increased levels of planning or permitting efforts in these areas, the amount of land previously available to recreation use may decrease. Mineral leasing operations and development also have the potential to alter the recreation setting. The construction of facilities and ROWs for pipelines, transmission lines, communication lines, and oil and gas development could adversely effect recreation resources. Land clearing, grading, construction, and drilling activities would create dust, noise, and increased traffic. These activities could have adverse effects on recreational uses because they would be visibly and audibly apparent during the recreational experience. The significance of any effect on recreation resource users would depend on the proximity to the development. Users could be inconvenienced if the ROW construction impedes access to recreational activities. However, effects would not likely be significant because of the temporary nature of the construction. The visual intrusion of these structures would be site-specific and would not affect recreationists outside the viewshed of each facility.

Off-Highway Vehicle Effects on Recreation (Alternative B)

All lands within the Ring of Fire planning area would be designated as “open” to OHV use. Effects on recreation use would be similar to Alternative A.

Summary of Alternative B Effects on Recreation

There would be no new SMAs established within the Ring of Fire planning area. Through the acquisition of lands and easements, more lands may become available for recreation use. The revocation of ANCSA 17(d)(1) withdrawals would allow for the leasing of fluid minerals and for the exploration and development of locatable and salable minerals on certain lands. Stipulations or other permit requirements around mineral exploration and development may have adverse effects on recreation use and access through restrictions in specific locations, and in other cases protect recreation uses and activities. However, given the low mineral development potential on BLM-managed lands (2,618 acres or less), effects would be minor. Recreation use may also be restricted in areas where there are conflicts with wildlife management objectives. Some conflicts between non-motorized recreation use and OHV use may occur in the Knik River Valley. Available information described in the sections above indicates that the adoption of the management actions, as described under Alternative B, may have a minimal adverse effect on recreation use and would be dispersed throughout the planning area.

4.3.2.6.4 Alternative C for Recreation

Wildlife Effects on Recreation (Alternative C)

Compliance, monitoring, and mitigation requirements would continue to be determined on a case-by-case basis. Implementation plans would be developed for the Knik River (Figure 2.3-5) and Haines Block SRMAs (Figure 2.3-4) that would, among other things, contain stipulations to address or protect wildlife concerns. These requirements may limit recreation use in certain areas where use conflicts with wildlife management objectives, such as within the Haines Block SRMA around sensitive mountain goat populations.

Visual Effects on Recreation (Alternative C)

The Neacola Mountains ACEC (Figure 2.4-5), the Lake Carlanna Municipal Watershed (Figure 2.4-6), and the Halibut Cove Forest Study Area (Figure 2.4-5) would be managed as VRM Class II. Visual resources in these areas would be maintained at the highest quality, helping to preserve the recreation setting and experiences found there. BLM-managed lands within the remainder of the planning area would be designated as VRM Class III.

Lands and Realty Effects on Recreation (Alternative C)

Access (ROWS) – The Mountain Goat Monitoring and Control Area within the Haines Block SRMA, and the Neacola Mountains ACEC (Figure 2.3-3) would both be identified as avoidance areas. Recreation use or access may be restricted in these areas through further planning efforts or permitting restrictions.

Acquisitions – Under Alternative C, the acquisition of lands and easements from willing landowners would be considered on a case-by-case basis. Land and easement acquisitions may produce a minimal beneficial effect by potentially increasing the amount of land available for recreation use. In addition, the Knik River SRMA, the Haines Block SRMA, the Neacola

Mountains ACEC, and the Iditarod NHT would be emphasis areas for land acquisitions. While land acquisitions may be seen as providing more areas for recreation use, the implementation plans that would be developed for these areas may have increased levels of restrictions on recreation use to avoid resource conflicts and meet outlined objectives of the SMAs.

Leasable, Locatable, and Salable Minerals Effects on Recreation (Alternative C)

Under Alternative C, 241,000 acres of unselected lands, and any selected lands (387,000 acres) whose selections are relinquished or revoked are open for fluid mineral leasing. Approximately 486,000 acres of unselected lands are available for locatable and salable mineral entry. Through increased levels of planning or permitting efforts in these areas, the amount of land previously available to recreation use may decrease under Alternative C, but not to the level of Alternative B. Mineral leasing operations and development also have the potential to alter the recreation setting. Potential surface disturbance resulting from projected leasable mineral activities may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). All activities, including all mineral activities, on BLM-managed lands will be subject to ROPs and/or stipulations (Appendix D).

This alternative would provide fewer opportunities for development activities, and thus surface disturbance and construction of facilities would be curtailed, which would likely benefit disperse recreation resources and resources users. The following areas, some of which currently have recreation use, of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry, so current users would see no change in their recreation setting from mineral development:

- Lake Carlanna Municipal Watershed (Figure 2.3-1)
- Halibut Cove Forest Study Area (Figure 2.3-2)
- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Off-Highway Vehicles Effects on Recreation (Alternative C)

All lands would be designated as “limited” to OHV use, consistent with the *Generally Allowed Uses on State Land* (Appendix E) under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). This may result in a beneficial effect to remote backcountry users, as OHV use would be restricted to existing trails. Within the Knik River SRMA, Haines Block SRMA, and Neacola Mountains ACEC, limitations to OHV use would be further refined to meet the objectives of the SMAs. Further implementation planning may also be designed to reduce conflicts between motorized and nonmotorized recreation users in areas of high OHV use, such as the Knik River Flats.

Wild and Scenic Rivers Effects on Recreation (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Recreation use within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Recreation

SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Recreation resources and uses would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Additional mineral leasing restrictions that may, among other things, limit or protect recreation use would be put in place for certain sensitive or unique areas. However, given the small number of acres designated as having high mineral development potential on BLM-managed lands, 2,618 acres or less), effects would be minor. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E). While some of these actions may adversely affect recreation, such as increasing restrictions on use or access in certain areas, the majority of the actions proposed under Alternative C would have beneficial effects on recreation use, access, and the preservation of recreation settings relative to current management actions.

4.3.6.2.5 Alternative D for Recreation

Wildlife Effects on Recreation (Alternative D)

Actions proposed under Alternative D for wildlife would have similar effects on recreation as discussed under Alternative C.

Visual Effects on Recreation (Alternative D)

The Lake Carlanna Municipal Watershed (Figure 2.4-9), and the Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II. Visual resources in these areas would be maintained, helping to preserve the recreation setting and experiences found there. The Neacola Mountains would be managed as VRM Class II, and all remaining lands in the planning area would be designated as VRM Class IV, which would allow landscape modification that could adversely affect the recreation experience of some users.

Lands and Realty Effects on Recreation (Alternative D)

Actions and effects under Alternative D for ROWs and land acquisitions would be the same as discussed under Alternative C, except the Neacola Mountains ACEC (Figure 2.3-3) would not be identified as an avoidance area.

Leasable, Locatable, and Salable Minerals Effects on Recreation (Alternative D)

Under Alternative D, effects would be the same as discussed under Alternative B, except the Lake Carlanna Municipal Watershed (Figure 2.3-2) and the Halibut Cove Forest Study Area (Figure 2.3-1) would be closed to mineral entry. Any recreation use currently occurring on those lands would be preserved.

Off-Highway Vehicles Effects on Recreation (Alternative D)

OHV effects on recreation use, access, and experience under Alternative D would be similar to management proposed under Alternative C. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). However, further planning efforts in the three proposed SMAs may designate areas as “open” to OHV use. This action would not alter the existing recreation experience in any of these areas, as lands are currently undesignated for OHV use.

Summary of Alternative D Effects on Recreation

SRMAs are identified in the Knik River (Figure 2.3-5) and the Haines Block (Figure 2.3-4), and an ACEC is identified in the Neacola Mountains. Resources, particularly wildlife, would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Additional mineral leasing restrictions that may, among other things, limit or protect recreation use, would be put in place for certain sensitive or unique areas. However, given the low mineral development potential on BLM-managed lands (2,618 acres or less), effects would be minor. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E). While some of these actions may adversely affect recreation, such as increasing restrictions on use or access in certain areas, the majority of the actions proposed under Alternative D would have beneficial effects on recreation use, access, and the preservation of recreation settings relative to current management actions.

4.3.3 Special Designations

4.3.3.1 Special Management Areas

Currently, the only SMA located within the Ring of Fire planning area is the Campbell Tract located in Anchorage. There are three areas being given SMA status under Alternatives C and D. The recreation attributes of the Knik River (SRMA) and Haines Block (SRMA) and the recreation and scenic qualities of the Neacola Mountains (ACEC) have contributed to the designation of these SMAs. The effects to the values encompassed in each of these SMAs are discussed in other sections of this chapter, including wildlife, visual, recreation, etc.

4.3.3.1.1 Direct and Indirect Effects Common to All Alternatives for Special Management Areas

Alternatives C and D are the only alternatives where new SMAs are identified. Because Alternatives A and B do not make any recommendations for designation, they will not be discussed further in this section.

4.3.3.1.2 Alternative C for Special Management Areas

Recreation Effects on Special Management Areas (Alternative C)

The Knik River (Figure 2.3-5) and the Haines Block (Figure 2.3-4) will be managed as SRMAs. The Neacola Mountains will be managed as an ACEC (Figure 2.3-3). Resources would receive further levels of protection in these areas through the development of implementation plans in these areas. The objectives of each of the SMAs (Appendix F) would be designed to minimize resource conflicts and to promote management collaboration with adjacent landowners.

Wild and Scenic Rivers Effects on Special Management Areas (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Identified ORVs for these river segments would receive some degree of consideration when reviewing proposed actions that might have an effect on the ORVs.

Summary of Alternative C Effects on Special Management Areas

Under Alternative C, Knik River and Haines Block will be managed as SRMAs and the Neacola Mountains will be managed as an ACEC. The special recreational values and scenic quality attributes in these areas, prompt SMA designations. Objectives outlined for these three areas can be seen in Appendix F.

4.3.3.1.3 Alternative D for Special Management Areas**Recreation Effects on Special Management Areas (Alternative D)**

The Knik River and the Haines Block will be managed as SRMAs. The Neacola Mountains will be managed as an ACEC. Resources would receive further levels of protection in these areas through the development of implementation plans in these areas. The objectives of each of the SMAs (Appendix F) would be designed to minimize resource conflicts and to promote management collaboration with adjacent landowners.

Summary of Alternative D Effects on Special Management Areas

Under Alternative D, Knik River and Haines Block would be managed as SRMAs and the Neacola Mountains would be managed as an ACEC. The special recreational values and scenic quality attributes in these areas, prompt SMA designations. Objectives outlined for these three areas can be seen in Appendix F.

4.3.3.2 Wild and Scenic Rivers

Currently, there are no designated WSRs on BLM-managed lands within the Ring of Fire planning area. Fourteen river segments were identified as eligible for WSR designation under Alternative C, but were not determined to be suitable for designation as WSRs. The outstandingly remarkable values (ORVs) of these river segments have contributed to their potential designation as WSRs. The effects to the values encompassed in each of these river segments are discussed in other sections of this chapter, including wildlife, visual, recreation, etc. Eligible river segments determined to be non-suitable through the WSR process would still be subject to a number of alternative protective methods and management decisions. Identified ORVs for these river segments would be taken into consideration when reviewing proposed actions that might have an effect on the ORV. Because Alternatives A, B, and D do not make any recommendations for designation, they will not be discussed further in this section.

4.3.3.2.1 Direct and Indirect Effects Common to All Alternatives for Wild and Scenic Rivers

Wildlife Effects on Wild and Scenic Rivers (Common to All)

Under all alternatives, critical habitat for listed species across Alaska has been designated for USFWS and NMFS T&E species. Critical habitat designations may include additional seasonal or year-round stipulations limiting activities in these areas. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, it is dependent upon the purpose and function of the critical habitat, and the action resulting in adverse destruction or modification. To the extent that critical habitat has been identified as an ORV in any of the 14 river segments, it will be taken into consideration when reviewing proposed actions that might have an effect on this specific ORV.

Forestry Effects on Wild and Scenic Rivers (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Within this plan, BLM would identify potential commercial harvest areas and high interest personal use areas. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest will occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads could be constructed to access parcels of timber in the future. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. Timber harvesting has been shown to have varying degrees of adverse effects on water resources, such as altering hydrologic processes (FEMAT 1993; USFS 2002a), which could in turn affect identified values or the free-flowing character of river segments unless appropriately mitigated. ORVs will be taken into consideration when reviewing proposed forestry actions.

Lands and Realty Effects on Wild and Scenic Rivers (Common to All)

BLM is working to complete the conveyance of Native- and State-selected lands by 2009. Once these lands are conveyed, the entity would own both the surface and subsurface mineral rights, unless otherwise stipulated. The management intentions of the new landowner may have effects on identified values of eligible WSR segments.

Leasable, Locatable, and Salable Minerals Effects on Wild and Scenic Rivers (Common to All)

Mining and oil and gas leasing could have adverse effects on the free-flowing character or maintenance of identified values of eligible WSR segments. If roads were authorized through ROWs associated with development on non-BLM-managed lands, or other development associated with mining or oil and gas leasing, there could be localized, but potentially long-term effects to the free-flowing character of river segments. ORVs will be taken into consideration when reviewing proposed mineral development actions.

4.3.3.2.2 Alternative C for Wild and Scenic Rivers

Leasable, Locatable, and Salable Minerals Effects on Wild and Scenic Rivers (Alternative C)

Given the small number of acres designated as having high mineral development potential on BLM-managed lands, the effects of mineral development on eligible WSR segments would be negligible. Potential surface disturbance resulting from projected leasable mineral development may affect approximately 2,558 acres (Appendix G). Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D), and could contain additional provisions to protect the free-flowing character and ORVs identified for eligible river segments.

Off-Highway Vehicles Effects on Wild and Scenic Rivers (Alternative C)

Lands would be designated as limited to existing roads and trails to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limiting OHV use within the Ring of Fire planning area could reduce any localized, adverse effects to eligible WSR segments relative to the current level of effects from OHV use, including increased levels of erosion and sedimentation, or the alteration of surface drainage patterns. Several rivers have been identified for their recreational values, which could include OHV use.

Summary of Alternative C Effects on Wild and Scenic Rivers

Effects to any of the eligible river segments for WSR designation under Alternative C are likely to be limited in scale, or concentrated in specific areas. Effects from forestry (approximately 20 acres per year), land conveyance, mining, and oil and gas developments would likely be limited, and may not overlap with river corridors; consequently potential effects would be minimal. OHV use would be designated as limited to existing roads and trails, possibly contributing to a reduction in seasonal adverse effects where they occur in eligible WSR corridors.

4.3.4 Social and Economic

4.3.4.1 Socioeconomic

4.3.4.1.1 Direct and Indirect Effects Common to All Alternatives for Socioeconomics

Economic activity could be stimulated in the planning area via extractive and non-extractive industries that utilize BLM-managed lands and resources. The magnitude and extent of economic activity that could be generated is uncertain at this scale of planning.

Economic activity could in turn, stimulate population increases in the Ring of Fire planning area. The population effects could be directly or indirectly associated with the economic stimuli. The extent and magnitude of the changes in population would likely be related to the extent and magnitude of the economic activity. Ethnicity, age, and migration are closely linked to population. Changes in these indicators would likely be commensurate with changes in population. While poverty rates are a demographic indicator, they are also linked to the economic element. Changes to the poverty indicator would likely be commensurate with changes in population and economy.

Forestry Effects on Socioeconomics (Common to All)

Some minimal forestry activity generally occurs within the Ring of Fire planning area each year. Timber harvesting has the potential to stimulate job creation and economic activity in an area. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future, so effects would be extremely localized. Actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula.

Hazardous Materials Effects on Socioeconomics (Common to All)

The BLM management actions under all alternatives for hazardous materials may have localized, beneficial effects on socioeconomic resources through prevention measures, and mitigation practices, as sites become known that are near known communities.

4.3.4.1.2 Alternative A for Socioeconomics

Leasable, Locatable, and Salable Minerals Effects on Socioeconomics (Alternative A)

Economic activity could be stimulated via resource development of leasable, locatable, and/or salable minerals within the Ring of Fire planning area. Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G).

Off-Highway Vehicle Effects to Socioeconomics (Alternative A)

OHV use on BLM-managed lands would remain unrestricted. OHV use generates economic activity associated with fuel and equipment sales and rental, and expenditures on fuel and lodging. Potential effects would be greatest in the proximity of high OHV use areas, such as the Knik River Valley.

Summary of Alternative A Effects on Socioeconomics

Effects to socioeconomic resources from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands, and would most likely occur along the existing road network. Small areas of forestry (approximately 20 acres per year) or mineral development may cause beneficial economic effects on a minimal, localized scale. Beneficial economic effects could also be felt through continued undesignated OHV use, especially in popular recreation areas such as the Knik River Valley.

4.3.4.1.3 Alternative B for Socioeconomics**Leasable, Locatable, and Salable Minerals Effects on Socioeconomics (Alternative B)**

Economic activity could be stimulated via resource development of leasable, locatable, and/or salable minerals within the Ring of Fire planning area. Under this alternative, more lands would be made available than under Alternative A for mineral leasing or locatable or salable mineral entry. However, the RFDs for minerals, as discussed under Alternative A, indicate that a total of 2,558 acres have potential for oil and gas disturbance (all ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands.

Off-Highway Vehicles Effects on Socioeconomics (Alternative B)

All lands within the Ring of Fire planning area would be designated as “open” to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). There is a potential to generate limited economic activity through this continued level of recreation activity, similar to Alternative A.

Summary of Alternative B Effects on Socioeconomics

Effects to socioeconomic resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per year) may cause beneficial economic effects on a minimal, localized scale. While revocation of ANCSA 17(d)(1) withdrawals could open additional lands to mineral exploration, the amount of additional mineral development is expected to be limited. Beneficial economic effects through local expenditures could also be felt through continued undesignated OHV use, especially in popular recreation areas such as the Knik River.

4.3.4.1.4 Alternative C for Socioeconomics

Leasable, Locatable, and Salable Minerals Effects on Socioeconomics (Alternative C)

Economic activity could be stimulated via resource development of leasable, locatable, and/or salable minerals within the Ring of Fire planning area. Under this alternative, more lands would be made available than under Alternative A, but less than Alternative B, for mineral leasing or locatable or salable mineral entry. However, projected mineral development would be limited in extent due to mineral potential (Appendix G). The RFDs for minerals indicate that a total of 2,558 acres have potential for oil and gas disturbance (all ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands. There are several areas that are specifically identified as closed to mineral entry (Tables 2.3-2 and 2.3-3), which could have either adverse (loss of jobs or revenue) or beneficial socioeconomic effects.

Off-Highway Vehicles Effects on Socioeconomics (Alternative C)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River (Figure 2.3-5) and Haines Block SRMAs (Figure 2.3-4), and the Neacola Mountains ACEC (Figure 2.3-3) implementation plans. Limiting use within the Ring of Fire planning area may cause a slight decrease in economic activity created through this recreation activity.

Recreation Effects on Socioeconomics (Alternative C)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. The creation of these SMAs could stimulate economic activity in these areas through increases in tourism and recreation activities.

Wild and Scenic Rivers Effects on Socioeconomics (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

The potential for increases in tourism and recreation activities within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Socioeconomics

Effects to socioeconomic resources from future management under Alternative C are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per year) or mineral development (up to 2,618 acres total) may cause beneficial economic effects on a minimal, localized scale. Some beneficial economic effects from increased recreation expenditures could also be seen from SMA designations. Minor adverse economic effects from reductions in expenditures could potentially be felt from limiting OHV use, especially in popular recreation areas such as the Knik River.

4.3.4.1.5 Alternative D for Socioeconomics

Leasable, Locatable, and Salable Minerals Effects on Socioeconomics (Alternative D)

Economic activity could be stimulated via resource development of leasable, locatable, and/or salable minerals within the Ring of Fire planning area. The amount of lands available for mineral leasing or locatable and salable mineral entry under this alternative would be the same as discussed under Alternative B. However, projected mineral development would be limited in extent due to mineral potential (Appendix G). The RFDs for minerals indicate that a total of 2,558 acres have potential for oil and gas disturbance (all ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands. There are several areas that are specifically identified as closed to mineral entry (Tables 2.3-2 and 2.3-3), which could have either adverse (loss of jobs or revenue) or beneficial socioeconomic effects.

Off-Highway Vehicles Effects on Socioeconomics (Alternative D)

Lands would be designated as limited to OHV use consistent with ADNR's *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may cause a slight decrease in economic activity as a result of this recreation activity.

Recreation Effects on Socioeconomics (Alternative D)

SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas. The creation of these SMAs could stimulate economic activity in these areas through increases in tourism and recreation activities.

Summary of Alternative D Effects on Socioeconomics

Effects to socioeconomic resources from future management under Alternative D are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per

year) or mineral development (up to 2,618 acres total) may cause beneficial economic effects on a minimal, localized scale. While revocation of ANCSA 17(d)(1) withdrawals could open additional lands to mineral exploration, the amount of additional mineral development is expected to be limited. Beneficial economic effects from additional recreation expenditures could also be seen from SMA designations. Minimal adverse economic effects from reductions in expenditures could potentially be felt through the limiting of OHV use, especially in popular recreation areas such as the Knik River.

4.3.4.2 Subsistence

4.3.4.2.1 Direct and Indirect Effects Common to All Alternatives for Subsistence

This section examines the direct and indirect effects of activities under the Ring of Fire PRMP/FEIS on subsistence activities, broadly defined, as they occur on all 1.3 million acres of BLM-managed land. BLM-managed lands area displayed on Figures 1.2-2 through 1.2-4 (Appendix A), and community subsistence use areas are displayed, along with BLM-managed land parcels on Figures 3.5-2 through 3.5-4 (Appendix A).

Although this discussion focuses on land management decisions, it is important to recognize that subsistence uses are defined differently and regulated differently by Federal and State management regimes, depending on land status. The Federal Subsistence Board manages subsistence harvests by rural Alaska residents on unencumbered BLM-managed lands, implementing the rural subsistence priority established in Title VIII of ANILCA. The Alaska Boards and Fisheries and Game regulate hunting and fishing on State and private lands. State managed hunting and fishing is also generally authorized on Federal lands unless these have been closed to non-Federally qualified hunting and fishing for reasons of conservation, providing for the federal subsistence program, or public safety. State fish and wildlife management recognizes a subsistence priority, though it is defined differently from the Federal statutes, in that all Alaskans qualify for State-managed subsistence hunting and fishing Federally defined subsistence uses occur only on the 486,000 acres of unencumbered BLM-managed lands, while on the 798,000 acres of State and Alaska Native selected lands under BLM management, the subsistence activities authorized are those regulated by the State.

Direct effects to subsistence from proposed actions are those occurring on BLM-managed lands, while indirect effects result from BLM managed or permitted activities under the plan but extend beyond the boundaries of BLM-managed lands. BLM-managed lands (selected and unencumbered) represent just two percent of the 61.4 million acres of total lands in the Ring of Fire planning area. Only a few large blocks of BLM-managed lands are found in the planning area, including the Haines blocks in the Southeast region, and the Neacola Mountains blocks in the Southcentral region. The remainder of the BLM-managed lands are found in very small, widely dispersed parcels. Analysis of proximity of a block of unencumbered BLM-managed lands to subsistence use areas will be offered where possible. However, data are not available to precisely describe the physical and biological character of the smaller parcels of BLM-managed lands, and therefore the importance of these parcels of land to subsistence users.

Subsistence hunting and fishing opportunities under federal or State management continue without direct effects from the Ring of Fire PRMP/FEIS, since management of subsistence harvests is not a land management activity.

Fisheries Effects on Subsistence (Common to All)

The Federal Subsistence Board, in which the BLM participates, manages subsistence fisheries on federal lands; including non-navigable waters on federal lands, and inland, navigable waters within and adjacent to federal conservation system units, such as National Parks, National Wildlife Refuges and National Forests. The Federal Board does not manage commercial or sport fisheries, and with very limited exceptions, ANILCA Title VIII does not apply in marine waters.

In general, throughout the planning area, subsistence fish resources are healthy, and subsistence harvest practices on BLM-managed lands are robust. Strategies for maintaining subsistence food ways include sharing, reserving portions of commercial harvests for subsistence uses, and educational fisheries. In the planning area as a whole, competition with non-local and commercial harvesters is an ongoing issue, as in the Southeast region for example, where allocation disputes over state-managed subsistence harvests of salmon in marine waters have been significant. However, the focus of this analysis is on subsistence harvests on the BLM managed lands.

Wildlife Effects on Subsistence (Common to All)

Under all alternatives, critical habitat for listed species across Alaska has been designated for USFWS and NMFS managed T&E species. Critical habitat designation would be beneficial for any subsistence species located within the area. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited.

Wildland Fire and Fuels Management Effects on Subsistence (Common to All)

Fire management and activities pertaining to maintenance or improvement of the timber value of parcels may include constructing firebreaks; thinning forest stands; and prescribing burns to remove deadfall and understory. These activities may have direct effects on terrestrial, riverine, and lacustrine habitats with direct and indirect effects on dependent subsistence resources. Siltation from prescribed burns, forest roads, and firebreak cutting can affect fish habitat and stream characteristics.

Forestry Effects on Subsistence (Common to All)

Minimal forestry activity generally occurs on BLM-managed lands within the Ring of Fire planning area. Historically, timber harvests have not exceeded approximately 20 acres per year, with little road construction activity. It is expected that a similar volume of harvest would occur in the foreseeable future. While no major road construction has occurred as a result of timber harvest, it is not inconceivable that short spur, or temporary roads may be constructed to access parcels of timber in the future. Given the relatively low value and limited demand for the timber in the Ring of Fire planning area, most of the timber harvested would come as an ancillary benefit from other construction projects such as ROW clearing or other permitted activities.

Timber harvest actions have tended to be concentrated on scattered parcels of BLM land throughout the Matanuska-Susitna Valley and the Kenai Peninsula. Depending on the scale of the operation, the direct effects of forest resource management practices would include changes in subsistence resource availability caused by habitat modification. In addition, infrastructure built to facilitate wildland fire management and harvest would increase access for both subsistence and non-local users, increasing competition and concentrating user harvest effort into access corridors. Although not historically part of the small-scale timber operations on BLM-managed lands, application of herbicides and insecticides to increase timber value could have unpredictable effects on other biological resources in the area, reducing availability through reduced population abundance or through local perceptions of contamination or scarcity. Given the low level of timber harvest activity on BLM-managed lands within the Ring of Fire planning area, potential effects would be minor in scale.

Lands and Realty Effects on Subsistence (Common to All)

Depending on location and scale, identification and designation of easements and rights-of-way for transportation, powerline, and pipeline corridors could have adverse effects on subsistence by increasing access to subsistence resources in those corridors. Non-local and subsistence user harvests could be concentrated in those corridors, and competition could also increase between user groups in easily accessible areas opened up by designating easements. Subsequent development of these easements, and development of land parcels accessed by transportation opportunities created by easement designation and development would result in increased competition for subsistence resources in the vicinity of the corridor, and in adjacent areas of private land.

Leasable, Locatable, and Salable Minerals Effects on Subsistence (Common to All)

Mineral and coal exploration, including testing for oil and gas, as well as hard-rock minerals, may involve the use of seismic testing and test drilling. These activities may deflect terrestrial and marine mammals several miles from their normal routes, and may disturb nesting, brooding, and fledgling birds and waterfowl (BLM 2005s). Depending on the location, frequency, and scale, this deflection could reduce resource availability for subsistence users in directly affected areas and increase competition in other areas, as harvesters are required to travel to other areas to harvest resources.

Infrastructure to support exploration and prospecting activity may include cutting trails, roads, and seismic lines, as well as the development of barge landings, airstrips, and helipads. For seismic surveys and test drilling, camps or other cat trains may be used to support the testing program, deflecting terrestrial and marine mammals from the area of operations up to several miles from normal paths. Aircraft use may disturb or deflect animals as well as resource users attempting to harvest a resource while activity is taking place in the general vicinity (BLM 2005s).

Depending on location and scale, adverse effects to subsistence may occur due to the development of areas for sand and gravel extraction. Noise and activity could deflect migratory animals and subsistence users dependent upon them from the area of operations for the duration of the activity. Lakes left in place as gravel dredge pits fill in with water may attract waterfowl, which may deflect them from their normal habitat areas and make them unavailable for subsistence users in their usual locations. Infrastructure related to transporting sand and gravel to a project location could increase access to the area, potentially increasing competition for subsistence resources in the vicinity of the gravel pit during operations and following closure if roads are left in place (BLM 2004t).

Recreation Effects on Subsistence (Common to All)

BLM assumes in this PRMP/FEIS that demand for recreational use of public lands in the Ring of Fire planning area is expected to increase over the next 10 to 15 years (Section 4.2.4). Increases are expected in recreational OHV use, sport fishing, hiking, canoeing/rafting, and highway tourism from the road system. Commercial recreation applicants are also expected to increase. Where recreational access increases, competition for subsistence resources may also increase. In addition, subsistence users may avoid areas where non-locals congregate and may have to travel farther to obtain subsistence resources.

4.3.4.2.2 Alternative A for Subsistence

Leasable, Locatable, and Salable Minerals Effects on Subsistence (Alternative A)

Under Alternative A, BLM-managed lands would be closed to fluid mineral leasing; however BLM has the authority to lease federal lands where oil and gas is being drained from wells on adjacent non-federal lands. All BLM-administered lands within the planning area would be open to hard rock mineral exploration, and those areas subject to leasing under 43 CFR 3400.2 would be open to coal exploration and study. Approximately 486,000 acres of unselected lands within the Ring of Fire planning area are available for the sale of mineral materials. Projected locatable mineral development may affect up to 60 acres, and development of salable minerals on BLM-managed lands is unlikely (Section 4.2.4 and Appendix G). Potential effects from mineral exploration and development are discussed under *Direct and Indirect Effects Common to All Alternatives*.

Off-Highway Vehicles Effects on Subsistence (Alternative A)

Under Alternative A, BLM will make no OHV use designation of its lands, leaving all lands unrestricted to OHV use, except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Effects on subsistence resources from OHVs include habitat changes due to overuse of routes, trail braiding, and the deflection of subsistence resources by the motion and noise of OHVs, but the scale of these potential effects is dependent on the proportion of BLM-managed lands within the subsistence use areas of communities in the Ring of Fire planning area, and on the characteristics of these lands including the value of those lands as harvest areas and the proximity of those lands to the community. Potential adverse effects may be moderate in localized areas of high OHV use, or even intense in areas such as the Knik River valley, but are minor on a regional scale.

OHVs enable subsistence users to range further in pursuit of resources that may be scarce closer to the home communities. Beneficial effects from OHVs include the ability to access a wider range of habitats and resources in a much shorter time than other modes of transportation. Adverse effects include issues with increased costs in time, money, effort, and wear associated with the necessity of traveling further from the population center to harvest subsistence resources, the focus of harvest efforts along established trails and routes, and the deflection of subsistence resources from the noise, activity, and smell of mechanized transportation. Competition for resources along established routes may increase within and between communities.

Summary of Alternative A Effects on Subsistence

The management actions proposed under the various management categories of Alternative A would have a variety of effects on the subsistence resources and uses on BLM-managed lands. All the proposed actions would maintain the effects to the subsistence use at current levels. Minimal forestry activity (approximately 20 acres per year) may cause minor, site-specific adverse effects to subsistence, unless appropriately mitigated. Any possible effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance due to mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. However, as BLM

continues to allow OHV use and other recreational activities to go unrestricted, adverse effects to subsistence users and resources could continue. Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A would have a minimal adverse effect on subsistence resources.

4.3.4.2.3 Alternative B for Subsistence

Lands and Realty Effects on Subsistence (Alternative B)

Alternative B recommends revocation of ANCSA 17(d)(1) withdrawals and restoring them to the public domain, revocation other agency withdrawals as requested by the holding agency, evaluation and designation of surface transportation routes, transfer of easement routes to State management, and reservation, marking, and verification of 17(b) easements as part of conveyance of parcels to Native corporations. Changes to land withdrawal status could have unforeseen effects on subsistence resources and users should lands be put into use for extractive industries, although effects would likely be minor given the limited mineral development potential on BLM-managed lands. Despite the limited lands under BLM management, the loss of access to lands presently under BLM management could reduce or block subsistence user access to harvest locations and traditional camps and sites at a small geographic scale relative to total subsistence use areas.

Identification, designation of, and transfer of easements and rights of way for transportation, power line, and pipeline corridors associated with resource development would have adverse effects on subsistence, and would result in increased competition for subsistence resources in the vicinity of the corridor and in adjacent areas of private land. However, given the limited mineral development potential on BLM-managed lands, potential adverse effects on subsistence would be minor. Conveyance of parcels to Native corporation ownership may increase the likelihood that these parcels will be developed in a manner incompatible with subsistence resource harvests.

Leasables, Locatables, and Salables Effects on Subsistence (Alternative B)

Under this alternative, localized adverse effects to subsistence resources and users may occur (described in *Direct and Indirect Effects Common to All*), but projected mineral development would be limited in extent due to limited mineral development potential (Appendix G). The RFDs for minerals indicate that a total of 2,558 acres have potential for disturbance due to oil and gas development (all ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands. Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D), further reducing the potential for effects in areas where development may occur.

Off-Highway Vehicles Effects on Subsistence (Alternative B)

Under Alternative B, all BLM-managed lands within the Ring of Fire planning area would be designated as “open,” with the exception of the closures at Campbell Tract and on BLM parcels within Chugach State Park. Because OHV use on BLM-managed lands is currently unrestricted, this management action would have similar effects on subsistence resources as Alternative A.

Summary of Alternative B Effects on Subsistence

The management actions proposed under the various management categories of Alternative B would maintain the effects on the subsistence use at its current levels. Minimal forestry activity (approximately 20 acres per year) may cause site-specific adverse effects to subsistence, unless appropriately mitigated. Any possible effects from BLM fisheries and wildlife program efforts, or from fire management would be minimal, and would likely not extend to the regional level. Any disturbance due to mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. Changes to land withdrawal status could have unforeseen effects to subsistence resources, and unrestricted OHV use could cause habitat changes due to overuse of routes, trail braiding, and the deflection of subsistence resources by the motion and noise of OHVs in those areas where access and demand allow for concentrated and growing use of BLM-managed lands for this purpose. Available information described in the sections above indicates that the adoption of the current management actions, as described under Alternative B, would have a minimal adverse effects on subsistence resources at localized, not regional or resource population, levels.

4.3.4.2.4 Alternative C for Subsistence

Lands and Realty Effects on Subsistence (Alternative C)

Under Alternative C, the effects of land disposals on subsistence would be the same as those discussed under Alternative A. Potential adverse effects on subsistence would stem from the designation of easements and rights of way across otherwise withdrawn land. Increased access to these lands would increase competition between and within subsistence and sports hunter groups. Easements and ROWs may increase the likelihood that BLM managed lands and adjacent parcels managed by other agencies and private landowners would be developed for uses incompatible with subsistence resource harvests. Development that tiers off of new easements and ROW may deflect subsistence resources, thus reducing subsistence resource availability. However, the Haines Mountain Goat Monitoring and Control Area, and the Neacola Mountains ACEC would be identified as avoidance areas, where more specific measures will be developed through implementation-level planning efforts to reduce effects on key wildlife and habitat resources.

Leasables, Locatables, and Salables Effects on Subsistence (Alternative C)

The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Projected mineral development would be limited in extent due mineral potential (Appendix G), thereby maintaining current conditions of subsistence resources. The RFDs for minerals indicate that a total of 2,558 acres have potential for disturbance from oil and gas development (all land ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands.

However, the following areas of both selected and unselected lands would remain closed to leasable, locatable and salable mineral entry:

- Lake Carlanna Municipal Watershed (Figure 2.3-1)
- Halibut Cove Forest Study Area (Figure 2.3-2)

- Neacola Mountains ACEC (Figures 2.3-1 and 2.3-3)
- Knik River SRMA (Figures 2.3-1 and 2.3-5)
- Haines Block SRMA (Figures 2.3-2 and 2.3-4)
- Ursus Cove (Figure 2.3-7)

Fluid mineral leasing, coal exploration, non-energy, leasable, and locatable mineral prospecting on BLM-managed lands would be subject to ROPs and stipulations (Appendix D). Under Alternative C, there are also seasonal and NSO constraints outlined for the Palmer Hay Flats and areas in the Cape Lieskof area of the Alaska Peninsula. Exploration and development in the near shore and continental shelf environments, such as Cape Lieskof, could deflect subsistence resources including marine mammals, shore and sea birds, and fish. However, in the areas identified as closed to mineral entry, or identified with seasonal or NSO constraints, subsistence resources should maintain their current conditions and remain protected from future mineral exploration and development.

Off-Highway Vehicles Effects on Subsistence (Alternative C)

BLM-managed lands would be designated as “limited” to OHV use consistent with ADNR’s *Generally Allowed Uses on State Land* (Appendix E), which requires such actions as restricting use to existing trails whenever possible. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limitations on OHV use would also be further refined within the Knik River and Haines Block SRMAs, and the Neacola Mountains ACEC implementation plans. Limiting use within the Ring of Fire planning area may reduce adverse effects to subsistence resources relative to the current level of effects. OHV designations, if conducted with the cooperative input of local communities, could be beneficial for subsistence if trails are designated and managed to reduce erosion, disperse hunter effort, and ease travel. Restrictions in some areas could reduce subsistence user access, adversely affecting subsistence users’ access to resources, focusing hunting effort on fewer areas, and increasing competition for limited resources available in those corridors. Subsistence resource habitat would be improved by reducing the number of braided trails, channeling users into fewer and more specific corridors, and initiating trail maintenance and improvement designed to reduce the damage caused by the activity to lands and waters of the planning area.

Recreation Effects on Subsistence (Alternative C)

Recreational effects to subsistence resources on BLM-managed lands would likely be similar to current levels of effects, and would be reduced in the three SMAs. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. All resources would receive further levels of protection through the development of implementation plans in these areas, including subsistence activities. Outside of the SMAs, it is possible, but less likely that concentrated use would result in adverse effects from lack of management and monitoring, reducing the productivity of some areas and potentially affecting population numbers of some species (Wilmot 2004; Fritz 2005). Where recreational access increases, competition for subsistence resources may also increase. In addition, subsistence users may avoid areas where non-locals congregate and may have to travel farther to obtain subsistence resources.

Wild and Scenic Rivers Effects on Subsistence (Alternative C)

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

Subsistence resources within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments.

Summary of Alternative C Effects on Subsistence

Effects to subsistence resources from future management under Alternative C are likely to be limited in scale to localized, specific areas. Minimal forestry activity (approximately 20 acres per year on BLM-managed lands) may cause adverse effects to subsistence, unless appropriately mitigated. Any possible effects from BLM fisheries and wildlife programs, or fire management would be minimal and localized, and would likely not extend to the regional or resource population level. Any disturbance due to mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres total), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects on subsistence use and resources. Some management actions, such as WSR designations and establishment of SMAs may provide additional protections to subsistence resources and recovery for any previously affected resources, resulting in a beneficial effect. However, where recreational access increases, competition for subsistence resources may also increase. Available information described in the sections above indicates that the adoption of the management actions may result in adverse effects to subsistence use and resources of a lesser extent and magnitude than the current management activities. Some management actions, such as the establishment of SMAs would restrict land use activities and allow for the recovery of previously affected vegetation resources in localized areas, resulting in a beneficial effect. Adverse effects could be highlighted, and subsequently mitigated against through close coordination with subsistence users during the implementation planning phase of certain areas.

4.3.4.2.5 Alternative D for Subsistence

Lands and Realty Effects on Subsistence (Alternative D)

Acquisitions that may affect subsistence resources under Alternative D are the same as discussed under Alternative C, except the Neacola Mountains ACEC would not be identified as an avoidance area.

Withdrawals – ANCSA 17(d)(1) withdrawals would be recommended for revocation under this alternative. Previously withdrawn lands that were not selected by the State or Native corporations would then be available for consideration for disposal. Because of the constraints in place under these withdrawals, there would be an increased potential for resource development and potential subsistence resource-disturbing activities. The magnitude of increase would be minor, given underlying land selection status, and the limited mineral development potential of BLM-managed lands.

Leasable, Locatable, and Salable Minerals Effects on Subsistence (Alternative D)

The level of development potential, and overall effects on BLM-managed lands for leasable, locatable, and salable minerals would be similar to that in Alternative B. Projected mineral development would be limited in extent due to mineral potential (Appendix G), thereby maintaining current conditions for subsistence resources throughout the Ring of Fire planning area. The RFDs for minerals indicate that a total of 2,558 acres have potential for oil and gas disturbance (all ownerships, not just BLM), and less than 60 acres of BLM-managed lands have the potential for locatable mineral entry. It is unlikely that any salable mineral development would occur on BLM-managed lands. Similar to Alternative C, the Lake Carlanna Municipal Watershed and the Halibut Cove Forest Study Area would be closed to any potential leasable, locatable and salable mineral entry, in an effort to maintain the current conditions of subsistence resources in those areas.

Off-Highway Vehicles Effects on Subsistence (Alternative D)

Under Alternative D, OHV use on BLM-administered lands would be managed as described under Alternative C. Although all lands under this alternative would be designated as “limited” to OHV use, BLM may choose to open some portions of the three proposed SMAs to OHV use. OHV closures would remain at Campbell Tract, as would restrictions on OHV use on BLM parcels within the Chugach State Park (11 AAC 20.015 and 11 AAC 20.040). Limiting use within the Ring of Fire planning area may reduce adverse effects to subsistence resources relative to the current level of effects. Areas of high OHV use, such as the proposed Knik River SRMA, may have the highest level of beneficial effects on subsistence resources if use is limited, presuming that any area that might be designated for open OHV use in this area sufficiently guards against adverse effects. Limiting areas to OHV use could restrict areas available for subsistence hunting on lands currently in use for that purpose, reducing user access to open areas or areas accessible by other means. Close coordination with subsistence users could mitigate or reduce these effects. Subsistence resource habitat would be improved by reducing the number of braided trails, channeling users into fewer and more specific corridors, and initiating trail maintenance and improvement designed to reduce the damage caused by the activity to lands and waters of the planning area.

Recreation Effects on Subsistence (Alternative D)

Effects from recreation on subsistence resources under Alternative D are the same as discussed under Alternative C. BLM would manage SMAs to maintain their value to subsistence users in cooperation with adjacent landowners and land managers

Summary of Alternative D Effects on Subsistence

Effects to subsistence resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (less than 20 acres

per year) may cause adverse effects to subsistence, unless appropriately mitigated. Any possible effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance due to mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres total), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to subsistence use and resources. Some management actions, such as the establishment of SMAs may provide additional protections to subsistence resources and recovery for any previously affected resources, resulting in a beneficial effect. However, where recreational access increases, competition for subsistence resources may also increase. Available information described in the sections above indicates that the adoption of the management actions may result in adverse effects to subsistence use and resources of a lesser extent and magnitude than the current management activities. Some management actions, such as the establishment of SMAs would restrict land use activities and allow for the recovery of previously affected vegetation resources in localized areas, resulting in a beneficial effect. Adverse effects could be highlighted, and subsequently mitigated against, through close coordination with subsistence users during the implementation -planning phase of certain areas.

4.4 Cumulative Effects

4.4.1 Methods

The CEQ defines cumulative effects as:

“The effect on the environment which results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant actions taking place over a period of time (40 CFR 1508.7).”

Cumulative effects are linked to incremental actions or policy changes that individually may have small outcomes, but that in aggregate with other factors, can result in greater effects to the environment of the Ring of Fire planning area. The intent of the cumulative effects analysis is to capture the total effects of many actions over time that would be missed by evaluating each action individually. The following cumulative effects assessment describes the additive and synergistic result of the actions proposed in this PRMP/FEIS as they interact with reasonably foreseeable future actions external to those proposed in the Ring of Fire PRMP/FEIS alternatives.

The goal of identifying potential cumulative effects is to provide for informed decisions that consider the total effects (direct, indirect, and cumulative) of alternative management actions. This section characterizes the incremental cumulative effects that potentially arise from external factors in combination with the direct and indirect effects. The potential for cumulative effects and their significance were evaluated for the resources and characteristics of the human environment described in Chapters 3 and 4.

The geographic and temporal scope of the cumulative effects analysis must be defined. For the Ring of Fire PRMP/FEIS, the temporal scope looks at reasonably foreseeable future actions and potential effects 15 years into the future, or through the year 2020. The geographic scope of analysis includes the Ring of Fire planning area, in that reasonably foreseeable future actions (RFFAs) throughout the planning area, not necessarily located on BLM-managed lands, are identified for review. However, the cumulative effects analysis is focused on BLM-managed lands and the adjacent zones in which direct and indirect effects of BLM-managed or permitted activities combine with effects of RFFAs to create additive or synergistic effects. Additive effects are repeated actions that may cause effects to build through simple addition. Synergistic effects result from the same or different actions that interact to produce cumulative effects greater than the sum of the effects. The analysis will not address actions, areas, and activities in parts of the planning area where there is no linkage to BLM-managed lands or effects of BLM-managed and permitted activities.

Because the PRMP/FEIS only provides a broad management framework, and specific actions or projects that may result from these management actions will be subject to additional NEPA compliance requirements, the analysis in this chapter estimates potential effects, based on known locations of developments or management actions. Effects are quantified based on available data.

RFFAs anticipated over the next 15 years on all lands in the Ring of Fire planning area, including private, State, Native corporation, and federal lands, have been considered in the analysis to the extent reasonable and possible. The best available information on location, timing, and magnitude of these actions has been utilized.

The following information is included in the cumulative effects analysis for each of the resources, resource uses, and other areas of BLM-management responsibility addressed by the Ring of Fire PRMP/FEIS:

- **Past and present effects** – these are past effects, such as the *Exxon Valdez* oil spill, that have influenced the current condition of the specific resource. They help describe the context of cumulative effects and the analysis of the contribution of BLM management actions to cumulative effects.
- **Summary of direct and indirect effects by alternative** – these effects are summarized for assessment of additive, incremental, and synergistic effects with the potential effects of specific RFFAs.
- **Summary of cumulative effects** – cumulative effects are evaluated by combining the direct and indirect effects associated with the alternative-specific management actions, with the external effects of RFFAs, and determining the significance of potential cumulative effects, and BLM's relative contribution to cumulative effects.

4.4.2 Reasonably Foreseeable Future Actions

RFFAs consist of projects, actions, or developments that can be projected, with a reasonable degree of confidence, to occur over the next 10 to 15 years and that will affect the same, or portions of the same resource evaluated for direct and indirect effects. In some cases, quantitative information is available on the characteristics of the RFFA. In most cases, project details have not advanced beyond the conceptual stage. Due to the widely scattered distribution of BLM-managed lands within the planning area, the identification of RFFAs was conducted on a broad, regional scale. The following RFFAs are categorized by type of event and planning region within the Ring of Fire planning area. Effects of these RFFAs on resources, resource uses, and other management responsibilities within the Ring of Fire planning area are discussed under the appropriate resource or management category in Section 4.4.

4.4.2.1 Climate Change

Climate change is both a RFFA that can result in additive and synergistic effects with BLM management actions in the Ring of Fire planning area, and can also be affected by management actions taken. Evidence is emerging that climate warming in Alaska can be linked to changes occurring in the structure and function of terrestrial ecosystems throughout the State. Since the 1950s, Alaska has warmed by an average of four degrees Fahrenheit (USEPA 2005). The assessment of the impacts of climate change is in its formative phase, and it is not yet possible to know with confidence the net impact of such change. However, observed changes include warming of permafrost throughout the State, the decrease in area of closed-basin lakes in southcentral Alaska, increased water temperature affecting anadromous fish habitat, and the altering of the ranges of some bird species. Climate change has also been linked to changes in disturbance regimes like fire and insect outbreaks in southcentral Alaska (McGuire 2003).

Development of oil and gas resources would produce some of the common greenhouse gases, primarily as a result of power requirements and fuel consumption, activities that produce CO₂. Because climate change must be viewed from a global perspective, the magnitude of the emissions potentially contributed by oil and gas activities in the planning area needs to be viewed in that context. The incremental contribution of greenhouse gases resultant from any of the alternatives in the Ring of Fire PRMP/FEIS would be minor when compared to total greenhouse gas contributions from sources outside of BLM actions in the planning area.

4.4.2.2 Forestry

Southeast Alaska Region

Timber Management – Several timber sales have been proposed within the Tongass National Forest (TNF) for 2005 requiring NEPA documentation. The majority of these timber sales are removed from large parcels of lands, though most sales are far removed from BLM-managed lands. The potential synergistic relationship to cumulative effects is limited to contributions to the regional economy. The TNF five-year timber sale plan, as amended March 24, 2006, indicates a proposed 760 million board feet (MMbf) to be sold in the time period up to and including 2010 (USFS 2006). This TNF plan is subject to various approvals and forthcoming decisions. As such, the sale plan is dynamic and the amount of timber harvested is neither definitive nor free from future change. Since most of these sales are far removed from BLM-managed lands, the

potential synergistic relationship to cumulative effects is limited to contributions to the regional economy.

4.4.2.3 Access, Transportation, Utility and Communication Corridors

Alaska Peninsula/Aleutian Chain Region

Cook Inlet to Bristol Bay Corridor – The Alaska Department of Transportation and Public Facilities (ADOT&PF) Southwest Alaska Transportation Plan proposes development of a surface transportation link between Cook Inlet and Bristol Bay. This roadway project would be constructed in segments, and would connect the communities of Pedro Bay, Nondalton, Iliamna, Newhalen, Igiugig, Naknek, and King Salmon to Cook Inlet, and would improve the transportation linkage to the Kenai Peninsula and Anchorage. Proposed segments in order of priority include: Williamsport-Pile Bay Road Improvements and Port Facility; Iliamna-Nondalton; Naknek-South Naknek; Pile Bay-Pedro Bay-Iliamna; Iliamna-Igiugig; Igiugig-Naknek; Dillingham-Aleknagik; Igiugig Road-Levelock Junction; Levelock-Aleknagik (ADOT&PF 2004f).

Currently, only the Williamsport-Pile Bay, Iliamna-Nondalton, Naknek-South Naknek; and Dillingham-Aleknagik segments are feasible within the next 20 years (ADOT&PF 2004f). Construction has already begun on the 15.5-mile Williamsport-Pile Bay Road Improvements and associated Iliamna River bridge replacement project. The Four Mile Creek, Timberline Creek, and Chanceless Creek bridges along the current Williamsport-Pile Bay road were upgraded in 2000 and 2002 (Denali Commission 2003). As of March 2005, ADOT&PF has requested assistance to begin baseline data collection for the Iliamna-Nondalton segment and associated Newhalen River bridge (State of Alaska 2005).

Smaller projects that would contribute to the Cook Inlet to Bristol Bay Corridor include the Chignik Connectors Project, and the Iniskin Bay-Williamsport Highway. ADOT&PF and HDR Alaska, Inc have begun collecting baseline data for the Chignik Connectors Project. This project would construct a 20- to 25- mile gravel road between the communities of Chignik, Chignik Lake, and Chignik Lagoon. The project is currently in the scoping phase (ADOT&PF 2004c). In conjunction with the Pebble Copper mining project, ADOT&PF is examining the feasibility of constructing a 75-mile road from the Pebble Copper mine site to a port site at Iniskin Bay or Williamsport. Draft reconnaissance engineering started in July 2004, and final reconnaissance engineering was completed in 2005 (ADOT&PF 2005b).

Southcentral Region

Cook Inlet to Bristol Bay Corridor – Refer to the discussion under the Alaska Peninsula/Aleutian Islands Region.

Knik Arm Crossing – In 2003, the Knik Arm Bridge and Toll Authority (KABATA) was formed to construct a bridge across the Knik Arm connecting the Municipality of Anchorage (MOA) to the Matanuska Susitna Borough (MSB). KABATA is currently working with the Federal Highways Administration (FHWA) to complete an EIS and the regulatory and design processes necessary to construct the project. The crossing would likely connect to the Glenn Highway in Anchorage, and in the Port MacKenzie District in the MSB. The Draft EIS is scheduled to be released to the public in the summer of 2006 and construction is estimated to be complete in 2010 (KABATA 2005).

Southeast Region

Gravina Access Project – The ADOT&PF and FHWA, with assistance from their contractor HDR Alaska, Inc., produced an EIS investigating alternatives for improving access between Revillagigedo Island and Gravina Island of southeast Alaska. The FHWA issued its Record of Decision (ROD) on the Final EIS for the Gravina Access Project on September 15, 2004. This identifies Alternative F-1, a combined 200-foot high/120-foot bridge crossing that incorporates Pennock Island, as the selected alternative (USDOT and FHWA 2004).

BLM properties lie less than one-mile north of the selected alternative corridor (Ketchikan Creek-Deer Mountain area) on Revillagigedo Island. BLM lands are also found in the Carlanna Lake area of Revillagigedo Island, northwest of the selected alternative (ADOT&PF and FHWA 2004).

Juneau Access Improvements Project – ADOT&PF proposes to construct a transportation corridor and/or improve marine ferry transportation between Juneau and Skagway. The approved action proposes a 50.5-mile highway from the end of Glacier Highway to Katzechin, and the construction of a marine ferry terminal at Katzechin outwash plain (ADOT&PF 2005a). Daily ferry shuttles would occur, servicing the communities of Haines and Skagway.

There is one Native-selected parcel of BLM land along the proposed alignment located between the Gilkey and Lace rivers of Berners Bay on the east side of Lynn Canal (ADOT&PF 2005a).

4.4.2.4 Locatable, Leasable and Salable Minerals

Alaska Peninsula/Aleutian Chain Region

Alaska Peninsula Oil and Gas Leasing Program – ADNR held the Alaska Peninsula Area Wide Oil and Gas Lease Sale in October 2005 (ADNR 2005g). The preliminary finding and proposed management consistency determination evaluates lands between Nushagak Bay along the northwest coast of the Alaska Peninsula southwest to the Cold Bay region. This includes the communities of Nelson Lagoon, Port Moller, Pilot Point, Ugashik, Egegik, King Salmon, and Naknek (ADNR 2005k). The Alaska Peninsula Areawide sale encompasses five million acres, of which only selected tracts that are State owned may be offered (ADNR 2005g). As a result of this oil and gas lease, two companies, Hewitt Minerals Corporation and Shell Offshore Inc., bid on and won tracts in the Aleutian East Borough totalling approximately 213,120 acres. Hewitt Mineral Corporation won four tracts for a total of \$313,920 while Shell Offshore Inc. won 33 tracts for a total of \$954,201.60.

Southcentral Region

Big Chunk Project – Liberty Star conducted a comprehensive exploration project to evaluate copper-gold deposits on State mining claims adjacent to the Pebble Copper Mine deposit (Alaska Minerals Commission 2005).

Cook Inlet Oil and Gas Leasing Program – On February 17, 2005, the ADNR Division of Oil and Gas held a competitive oil and gas leasing in the Cook Inlet Areawide 2005 Oil and Gas Lease Sale on May 18, 2005. This sale encompassed four million acres bordered by the Chugach and Kenai mountains in the east, the Aleutian Range to the west, the City of Houston to the north and Homer in the south. Approximately 55 tracts were sold, totalling nearly 250,000 acres, located in the vicinity of the communities of Anchorage, Kenai, Palmer, Wasilla, Houston,

Hope, Nikiski, Soldotna, Sterling, Ninilchik, Kasilof, Homer, Clam Gulch, Nikolaevsk, Anchor Point, Knik, Tyonek, and Salamtov (ADNR 2005i).

Susitna Basin Exploration License Area – In 2003, ADNR approved two oil and gas license areas in the MSB within the Yentna, Kahiltna, and Susitna river basins to Forest Oil Corporation. The combined area is 857,681 acres and is for a term of seven years, effective November 1, 2003 (ADNR 2005j).

Pebble Copper Mine Project – The Pebble gold-copper-molybdenum-silver deposit is located in the Lake and Peninsula Borough, just north of Frying Pan Lake and 18 miles northwest of Iliamna. In 2004, Northern Dynasty Minerals Ltd. began a \$34.5 million program to collect engineering, environmental, and socio-economic data required for a Bankable Feasibility Study and submission of permit applications for the Pebble Copper Mine. The 2005 geological program in the east zone of the prospect identified a substantial addition to the mineral prospect. For 2006, a drilling program worth \$18-20 million is planned, and feasibility and permit applications have been deferred until 2007. Design/Engineering was initially expected to begin early 2006 and end mid-2009. Construction was initially scheduled between mid-2008 to mid-2010 with production beginning late-2010 (Northern Dynasty Minerals Ltd. 2005). However, all of these milestones are set back while the east zone prospect is more fully explored.

Wishbone Hill Coal Field – The ADNR Division of Geological and Geophysical Surveys (DGGS) made a Preliminary Best Interest Finding on February 4, 2005, to lease 40 acres of the Wishbone Hill Coal Field near Sutton, Alaska, by competitive auction. The decision was made in response to an application by Sutton Partners LLC (Knoll Acres Associates, LLC) to obtain the rights to rejected coal tailings remaining from the previous Evan Jones coal washery located in the Wishbone Hill Coal Field. The DGGS determined that the 40 acres lease tract has high potential for coal development (ADNR 2005f).

Southeast Region

Kensington Gold Project – Coeur Alaska, Inc. acquired the Kensington and Jualin Mines in the 1990s and has received all permits to begin construction of a new mine facility. The construction should occur over an 18-month window with a 10-year expected life-of-mine (ADOT&PF 2005a). In 2004, the USFS issued a ROD for the Kensington Gold Project EIS which approves the following modifications to the 1997 Approved Plan of Operations (Alternative D): construction of a Tailings Storage Facility with discharge subject to the National Pollution Discharge Elimination System (NPDES), surface processing of ore located at mill facilities in the Johnson Creek drainage, and upgrade of the Kensington and Jualin Mine access roads (USFS 2004g).

4.4.2.5 Recreation Activities

Southcentral Region

Recreation and OHV Use on State and Borough Lands in the Knik River Valley – Significant recreation and OHV use occurs throughout the entire Knik River Valley. The MSB initiated planning activities for Borough-managed lands. In 2005, legislation was introduced to establish a State motorized recreation area within the Knik River Valley. As of early May 2006 this legislation, House Bill 307, passed both the Alaska House of Representatives and Senate, and is awaiting governor approval.

Heli-skiing – In 2004, the USFS issued a ROD and special use permit to Chugach Power Guides to conduct heli-skiing on the Glacier and Seward Ranger Districts. The selected alternative allows Chugach Power Guides to conduct a total of 2,200 client days in existing and new locations under a five-year special use permit. Operations are authorized for the following core-units: Glacier-Winner, West Twentymile, North Twentymile, East Twentymile, Placer-Skookum, East Bench Peak, North Bench Peak, West Bench Peak and Grandview, Mid Seattle Creek, East Seattle Creek, East Moose Creek, and Mount Ascension (USFS 2004e).

Southeast Region

Heli-skiing – Currently Out of Bounds Adventures, Inc. conducts outfitter-guided heli-skiing on the TNF in the Antler Glacier and Antler River Valley, Bucher Glacier, and the lower half of Taku Glacier, Chilkat Mountain Range south of the Endicott River Wilderness (USFS 2001b). Native-selected BLM parcels are located adjacent to or within the flight path of some of these tours.

In 2002, Out of Bounds Adventures, Inc. and Southeast Alaska Backcountry Adventure were granted a five-year SRP for BLM administered lands. Teton Gravity Research was granted a three-year permit for helicopter access to film skiers and snowboarders (BLM 2002c). Operations would occur on the Denver, Schube, Meade, West Creek, Ferebee, Norse, Grand Canyon, Chilkat, and Bertha glaciers (BLM 2002d).

4.4.2.6 Other BLM Planning Activities

BLM is in the process of preparing or completing other RMPs for BLM-managed lands throughout the State of Alaska. These include the East Alaska PRMP/FEIS, and the Bay RMP/EIS (under preparation), both of which are adjacent to the Ring of Fire planning area, and the Kobuk-Seward Draft RMP/EIS, which is not adjacent to the Ring of Fire planning area. These are independent plans that follow the same planning procedures as the Ring of Fire PRMP/FEIS. BLM evaluates the specific resources within each of these different planning areas with regard to the requirements of the BLM Land Use Planning Handbook. Potential effects on each resource and resource use are evaluated within these RMP/EISs within the context of each planning area, and their intrinsic values and/or sensitivity to impacts.

These other BLM RMP/EISs are considered RFFAs that have the potential to interact with the Ring of Fire PRMP/FEIS and result in cumulative effects. Primary examples of interaction between plans would be with resources that cross planning boundaries, such as migratory fish, wildlife, and waterfowl. While physical resources such as air and water also cross planning boundaries, there are no activities or uses approved on BLM-managed lands in the Ring of Fire PRMP/FEIS that would result in synergistic effects on these resources in the other planning areas such as East Alaska or Bay. Resources uses, such as leasable, locatable, and salable minerals, OHVs, and recreation can also occur across planning boundaries. The location and limited development potential for mineral resources on BLM-managed lands within the Ring of Fire planning area are not likely to result in cumulative effects in other planning areas. Areas with access and connection for OHV and recreation use between East Alaska and Ring of Fire does not exist due to the location and scattered nature of BLM-managed lands within Ring of Fire planning area. Management actions taken with regard to OHV use in the Knik River area could redirect use to other areas, including East Alaska, and will be addressed in the implementation-level plan for the Knik River SRMA.

There is a potential for synergistic effects between decisions made in the Bay Plan regarding mineral development in the vicinity of the Pebble Copper mine, and activity along the Iniskin River-Pile Bay Road. Fish, wildlife, and subsistence resources could experience some cumulative effects. However, the Draft Bay RMP/EIS has not been completed, and it is premature to reach any conclusions regarding potential cumulative effects between these plans.

4.4.3 Cumulative Effects for Resources

4.4.3.1 Soils

4.4.3.1.1 Past and Present Effects for Soils

Disturbances to Alaska Peninsula/Aleutian Chain and Kodiak regions' soil resources have resulted from natural forces such as climate, volcanic eruptions, from shoreline contamination by the *Exxon Valdez* oil spill, and from mining and transportation projects, construction of facilities, and military activities in site-specific areas. The Southcentral region is home to the most populous city in the State, Anchorage. This Southcentral region also houses the fastest growing area in the State of Alaska, the Matanuska Susitna Valley. The soils in and around these larger urban areas have been affected heavily by transportation projects, construction of facilities, and recreation-related activities (particularly OHV use). Timber harvest and wildland fires have likely affected the soil resources in other parts of the region. Soils in the Southeast region have been affected by transportation projects, construction of facilities, abundant timber harvest, and use of recreational trails.

4.3.4.1.2 Summary of Direct and Indirect Effects by Alternative for Soils

Alternative A – Current Management for Soils

The management actions proposed under Alternative A would likely have generally minor effects on soil resources in the Ring of Fire planning area due to the relatively low level of current activity associated with mineral development. Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. All of the proposed actions would maintain the effects to soil resources at their present levels (with an expected gradual increase due to rises in populations). Currently OHV use is undesignated on BLM lands, effectively making all BLM lands within the planning area unrestricted to OHV use. Within the Knik River Valley, there may be localized areas of moderate adverse effects due to compaction and erosion.

Alternative B – Resource Development for Soils

The management actions proposed under Alternative B would differ from Alternative A in that removal of ANCSA 17(d)(1) withdrawals would open additional lands to mineral entry, and all lands would be designated as “open” to OHV use. Timber harvests (approximately 20 acres per year) would cause localized adverse effects on soils from clearing and road building. Opening additional lands to mineral entry (up to 2,618 acres total) could increase exploration and development activities; however, the potential for additional development is low (Appendix G) and would be subject to ROPs and stipulations. Adverse effects on soil resources would be minor, and localized in nature. Effects from OHV use would be similar to those seen under Alternative A, which would be generally minor and short-term, with moderate adverse effects on soil resources seen within localized areas of the Knik River Flats.

Alternative C – Resource Conservation for Soils

The management actions proposed under Alternative C are directed towards resource conservation while continuing to allow for multiple use activities. ANCSA 17(d)(1) withdrawals would be maintained, and mineral exploration and development restrictions would be in place for specific sensitive or unique areas (Section 4.3.1.2.4). Timber harvests (approximately 20

acres per year) would cause localized adverse effects on soils from clearing and road building. The Knik River and Haines Block are identified as SRMAs, and the Neacola Mountains as an ACEC. Implementation plans would be developed for these areas. Under Alternative C, BLM would designate all lands as “limited” to existing roads and trails for OHV use. All of these activities would be beneficial to the soil resources located on BLM-managed lands by preventing degradation and compaction, relative to the current management actions.

The information discussed above indicates that implementation of management actions of Alternative C would result in fewer adverse effects on soil resources than under Alternatives A or B. Moreover, as a result of some management actions that would restrict land use activities in certain areas (e.g. designation of lands as SMAs), soil resources would likely benefit from implementation of Alternative C.

Alternative D – Proposed Action for Soils

The management actions proposed under Alternative D are directed towards resource conservation while continuing to allow for multiple use activities. ANCSA 17(d)(1) withdrawal orders would be revoked, although restrictions would be in place for certain sensitive or unique areas. Timber harvests (approximately 20 acres per year) and potential mineral development (up to 2,618 acres of total surface disturbance) would cause localized adverse effects on soils from clearing and road building. The Knik River and Haines Block are identified as SRMAs, and the Neacola Mountains as an ACEC. Implementation plans would be developed for these areas. Under Alternative D, BLM would designate all lands as “limited” to OHV use. All of these activities would be beneficial to the soil resources located on BLM-managed lands, relative to the current management actions.

The information discussed above, relative to Alternative D, indicates that implementation of management actions of this alternative would result in fewer adverse effects on soil resources than under Alternatives A or B. Moreover, as a result of some management actions that would restrict land use activities in certain areas (e.g. designation of lands as SMAs), soil resources would likely benefit from implementation of Alternative D. However, this alternative would implement fewer restrictions than Alternative C, resulting in both beneficial and adverse direct and indirect effects on soil resources.

4.3.4.1.3 Overall Cumulative Effects on Soils

Depending on scale and location, RFFAs related to climate change, timber sales, transportation projects, and exploration and development of leasable, locatable, and salable minerals will have the general potential to effect soil resources through compaction, contamination, erosion, loss of organic matter, and melting of permafrost where present, on BLM managed lands, and lands affected by indirect effects of BLM managed or permitted activities within the Ring of Fire planning area. Climate change is a major factor that may directly (drought or flooding) and indirectly (contributing to increased levels of wildfires) affect soil resources.

The aggregation of past and, present actions, and RFFAs, as well as those direct and indirect effects under all alternatives may continue to adversely affect soil resources on BLM managed and associated affected lands in the Ring of Fire planning area. The management actions that may adversely affect soil resources include, but are not limited to the following: forestry, exploration, development, and production of leasables, locatables, and salables, recreation; and OHV use, but actual level of potential impacts varies depending on a number scale and distance

from BLM lands. The broad differences between the alternatives are as follows: Alternative A would continue the current management practices employed by BLM; Alternative B would emphasize resource development (although such development would be low due to limited mineral development potential on BLM-managed lands), and continuation of unrestricted OHV use; Alternative C would emphasize resource conservation and special management activities in the Haines Block, Knik River, and Neacola Mountains; and Alternative D would result in both resource development and conservation on BLM-managed lands.

Given the relatively low level of forestry (approximately 20 acres annually on BLM-managed lands), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system), the contribution to cumulative effects on soil resources of RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of BLM-managed activities on a regional scale. Within specific localized areas such as the Knik River, the high OHV use on BLM-managed lands may combine with concentrated OHV use on neighboring lands in the Knik River valley, creating a moderate overall level of cumulative effects on soil resources in the area. This effect is somewhat mitigated by annually recurring natural forces such as flooding. In addition, Alternatives C and D would address BLM management contributions to adverse effects on soil resources in the Knik River area through future implementation planning for the SRMA.

4.4.3.2 Water Resources

4.4.3.2.1 Past and Present Actions for Water Resources

Disturbances to Alaska Peninsula/Aleutian Chain, and Kodiak regional watersheds have resulted from natural forces such as climate change, and from mining and transportation projects, construction of facilities, and military activities. Oil spills in the Alaskan coastal waters may have affected the water quality of tidally-influenced streams and rivers in the coastal watersheds (refer to Figures 3.2-8 and 3.2-9 for an illustration of the watersheds within this region).

The Southcentral region supports the largest human population in the State, and the surface waters in the larger urban areas have been affected regionally by climate change, and in site-specific areas, by transportation projects, construction of facilities, and recreation-related activities. Timber harvest and wildland fires have potentially affected the water resources in other parts of the region. Oil spills in the Alaskan coastal waters may have affected the water quality of tidally-influenced streams and rivers in the coastal watersheds (refer to Figure 3.2-10 for an illustration of the watersheds within this region).

In the Southeast region, watersheds have been affected by mining, transportation projects, construction of facilities, and timber harvest (refer to Figure 3.2-11 for an illustration of the watersheds within this region).

4.4.3.2.2 Summary of Direct and Indirect Effects by Alternative for Water Resources

Alternative A – Current Management for Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands where there is existing mineral development and intensive OHV use. Forestry activity, of less than 20 acres per year, may cause sedimentation and other degradation of water quality, unless appropriately mitigated by setbacks from water bodies. Any possible effects from hazardous materials, renewable energy, and recreation would be minimal, and would likely not extend to the regional level. Any disturbance due to mining, oil and gas, and associated road development would likely be limited in extent given the low potential for mineral development (up to 2,618 acres total); and potential adverse effects on water resources would be minor. Adverse effects may result from locatable and salable material mining, if any such mining is undertaken however, these effects would likely only occur on less than one percent of lands within the Ring of Fire planning area. As OHV use remains unrestricted, some short-term adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality may continue in heavy use areas, such as the Knik River Flats clear water streams.

Alternative B – Resource Development for Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands along the road network, areas with existing mineral development activity, or higher mineral potential, and in areas of concentrated OHV use. Effects from forestry, ROWs, mining, oil and gas would likely be limited in extent; consequently only a small portion of the waters that occur in BLM-managed

lands may be affected. OHV use would be designated as open, contributing to short-term adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality in heavy use areas, such as the Knik River valley clear water streams. Overall, effects to water resources under Alternative B would mainly occur on a local scale.

Alternative C – Resource Conservation for Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative C are likely to be limited in scale, and concentrated in specific areas. Effects on water resources from forestry (approximately 20 acres per year), establishment of ROWs, mining, oil and gas (up to 2,618 acres total) would be minor, due to avoidance areas, low potential for mineral development, and retention of ANCSA 17(d)(1) withdrawals. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. Some management actions, such as establishment of SMAs may restrict land use activities within these specific areas, and allow for the protection and recovery of any previously affected water resources. Thus while Alternative C may result in as many, or nearly as many effects to water from development activities (fluid mineral, locatable mineral, salable mineral, and forestry) as Alternative B, limitations on OHV use in some areas could reduce effects to water resources generally (and especially to Knik River tributaries).

Alternative D – Proposed Action for Water Resources

Effects to water quantity, drainage patterns, and water quality from future management under Alternative D are likely to be limited in scale, concentrated in specific areas, and minor in magnitude. Opening additional lands to mineral entry through revocation of ANCSA 17(d)(1) withdrawals could increase exploration activities; however given the small number of acres designated as having high mineral development potential on BLM-managed lands, effects would be minor, and would be subject to ROPs and/or stipulations. Potential effects from these actions would be minor. Effects from forestry (approximately 20 acres per year), and the establishment of ROWs would likely be limited in extent; consequently only a small portion of the waters that occur in BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to water resources through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. The establishment of three SMAs may restrict land use activities within these specific areas, potentially benefiting water resources. Thus while Alternative D may result in a similar level of effects to water from development activities (fluid mineral, locatable mineral, salable mineral, and forestry) as Alternative B, limitations on OHV use in some areas could reduce effects to water generally (and especially to Knik River tributaries) and establishment of SMAs could protect and allow for recovery of previously affected water resources. The establishment of SMAs and restrictions on OHV use, leasable, locatable and salable mineral development would provide further protection and allow for recovery of previously affected water resources to a greater extent than Alternatives A or B.

4.4.3.2.3 Overall Cumulative Effects on Water Resources

Past and present actions that have affected water resources throughout the Ring of Fire planning area have included climate change, volcanic eruptions, mining and oil and gas development activities, transportation projects, construction of facilities, and timber harvesting, and would be the same for all alternatives. Climate change could affect the level of rainfall and glacial melt, with associated increased levels of river sediment. Oil spills in Alaskan coastal waters may have affected the water quality of streams and rivers in the coastal watersheds. Future reasonably foreseeable development activities associated with transportation projects and mineral exploration may have adverse effects on drainage patterns and water quality, although this would depend upon the location and area of activity. The effects of road construction on water resources in currently urbanized areas may increase the already altered drainage patterns and continue to introduce pollutants through runoff. Multiple mineral exploration and development activities rarely occur over the same area; however, multiple activities within a watershed are possible on the Alaska Peninsula, and can substantially decrease water supply in local aquifers, alter drainage patterns, and degrade the water quality in receiving waters.

In terms of direct and indirect effects, management actions proposed would vary by alternative, with Alternatives C and D providing some additional benefits related to water quality and alterations in drainage patterns through development of ROPs and stipulations (Appendix D), limitations on OHV use, and implementation planning in three specific areas. However, given the relatively low level of forestry (approximately 20 acres annually on BLM-managed lands), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system) on BLM-managed lands within the planning area, the contribution to cumulative effects on water resources from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of BLM-managed activities on a regional scale. Within specific localized areas such as the Knik River, the high OHV use on BLM-managed lands may combine with concentrated OHV use on neighboring lands in the Knik River valley, creating a moderate overall level of cumulative effects on clearwater streams in the area. Implementation planning under Alternatives C and D would help to reduce cumulative effects.

4.4.3.3 Fisheries and Aquatic Habitat

4.4.3.3.1 Past and Present Effects for Fisheries and Aquatic Habitat

Increases in urban and suburban development, timber and mineral development, oil and gas exploration and development, transportation projects, oil spills (such as the *Exxon Valdez*), and fish harvest (subsistence and, recreational) have had site-specific adverse effects on fisheries and aquatic habitat for both anadromous and resident freshwater species within the Ring of Fire planning area. Effects include loss of riparian and spawning habitat, impediments to fish migration, and deterioration of water quality. In some cases, such as the *Exxon Valdez* oil spill, effects have been severe in specific areas, but have not resulted in long-term regional effects to BLM-managed resources. Additionally, the designations of critical habitats and National Wildlife Refuges (NWR) on BLM lands (most beginning in the 1970s), and additional protection to fish habitat that designation provides have had a beneficial effect on the conservation of fish species and their habitat. However, the amount of critical habitat currently designated and that overlaps with BLM-managed lands is quite limited. Furthermore, although compliance with Section 7 may result in some limits on development activities, the scope of limits that may be required is dependent upon the purpose and function of the critical habitat, and the development related action resulting in adverse destruction or modification.

4.4.3.3.2 Summary of Direct and Indirect Effects by Alternative for Fisheries and Aquatic Habitat

Alternative A – Current Management for Fisheries and Aquatic Habitat

Effects to fish habitat from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands. Areas with potential for mineral development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, making potential effects on fish and fish habitat minimal, and localized in scale. General adverse recreation effects would be felt on a minimal localized scale. Acquisition of land from willing landowners, particularly when they occur along riparian areas, can have a beneficial effect on fish habitat by preventing development of private land and providing consistent habitat management. The unrestricted OHV use, especially in high-use areas such as the Knik River Valley, may cause changes in stream morphology and increased levels of pollution. Overall, minimal adverse effects to fish habitat under Alternative A may occur on the local scale.

Alternative B – Resource Development for Fisheries and Aquatic Habitat

Effects on fish habitat from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and would be similar to Alternative A. With the relinquishment of ANCSA 17(d)(1) withdrawals, mineral exploration could increase. However, areas with potential for mineral disturbance due to mining and oil and gas exploration and development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, and potential effects on fish and fish habitat would be minor. Timber harvests would continue at approximately 20 acres per year. General adverse recreation effects would be felt on a minimal, localized scale. Acquisitions, particularly when they occur along riparian areas, can have a beneficial effect on fish habitat by preventing development of private land and providing consistent habitat management. Designating the entire planning area as “open” to OHV use may continue to cause changes in stream morphology and increased levels of

pollution in high use areas such as the Knik River drainage. Overall, minimal adverse effects to fish habitat under Alternative B may occur on the local scale.

Alternative C – Resource Conservation for Fisheries and Aquatic Habitat

Effects to fish habitat from future management under Alternative C would be similar to Alternative A, and are likely to be limited in scale, or concentrated in specific areas. Effects from forestry (approximately 20 acres per year), ROWs, and mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) would likely be minor due to the avoidance areas identified under this alternative, low potential for mineral development, and retention of ANCSA 17(d)(1) withdrawals. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to fish habitat through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection of fish habitat, resulting in a beneficial effect.

Alternative D – Proposed Action for Fisheries and Aquatic Habitat

Effects to fish habitat from future management under Alternative D are likely to be limited in scale, concentrated in specific areas, and minor in magnitude. Opening additional lands to mineral entry could increase exploration activities; however the potential for additional development is low and represents less than one percent of BLM-managed lands within the planning area. Effects from forestry (approximately 20 acres per year), ROWs, mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) would likely be limited; consequently only small portions of BLM-managed lands may see minor effects to fish habitat. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to fish habitat through changes in water quantity, alterations in drainage patterns and degradation of water quality, especially in heavy use areas, such as the Knik River SRMA. The establishment of SMAs may restrict land use activities within these specific areas, potentially benefiting fish and fish habitat.

4.4.3.3 Overall Cumulative Effects on Fisheries and Aquatic Habitat

Past and present actions that have affected fisheries and fish habitat throughout the Ring of Fire planning area have included natural forces such as climate change and volcanic eruptions, mining activities, transportation projects, construction of facilities, and timber harvesting, and would be the same for all alternatives. Oil spills in Alaskan coastal waters may have affected the water quality of streams and rivers in the coastal watersheds. Adverse effects have included the loss of riparian and spawning habitat, impediments to fish migration, and deterioration of water quality. Reasonably foreseeable future development activities associated with transportation projects and mineral exploration may have adverse effects on drainage patterns and water quality, although this would depend upon the location and area of activity. There are several proposed timber sales within the Southeast region and a mining project on the Alaska Peninsula, where activities may adversely affect fish and fish habitat through increased runoff and sedimentation.

In terms of direct and indirect effects, management actions proposed would vary by alternative, with Alternatives C and D providing some slightly greater benefits related to fish and fish habitat than Alternatives A and B, including the minimization of habitat and water quality degradation

through the development of ROPs and stipulations (Appendix D) that would be applied to development activities, limitations on OHV use, and future implementation planning in three specific areas. However, given the relatively low level of forestry (approximately 20 acres annually on BLM-managed land), mineral disturbance due to mining and oil and gas exploration and development (approximately 2,618 acres, or less than one percent of BLM-managed lands), and recreation use on BLM-managed lands, the contribution to cumulative effects on fish and fish habitat from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities, far outweighs the contribution of proposed management actions on a regional scale. Within specific localized areas such as the Knik River, the high OHV use on BLM-managed lands may combine with concentrated OHV use on neighboring lands in the Knik River valley, creating a moderate overall level of cumulative effects on fish habitat in the area. Implementation planning proposed under Alternatives C and D would help reduce cumulative effects in those locations.

4.4.3.4 Wildlife Resources

4.4.3.4.1 Past and Present Effects for Wildlife

Baseline information on wildlife in the Ring of Fire planning area is summarized in Section 3.2.9, including past and present events and activities that have substantial effects on the populations of BLM sensitive species and popular game species. Activities include increases in urban and suburban development, timber and mineral development, transportation projects, oil spills, and wildlife harvest (subsistence, recreational), which have had site-specific adverse effects through loss and fragmentation of habitat, disturbance, and impediments to migration routes.

In some cases, such as the Exxon Valdez oil spill, effects have been severe in specific areas, but have not resulted in significant long-term regional effects to BLM-managed resources. Additionally, the designations of critical habitats and NWRs (most beginning in the 1970s), have had a beneficial effect on the conservation of wildlife species and their habitats. However, the amount of protected habitat that overlaps with BLM-managed lands is quite limited. Although compliance with Section 7 may result in some limits on development activities, the scope of limits that may be required is dependent upon the purpose and function of the critical habitat, and the development-related action, resulting in destruction or modification.

4.4.3.4.2 Summary of Direct and Indirect Effects by Alternative for Wildlife

Alternative A – Current Management for Wildlife

The management actions proposed under the various management categories of Alternative A would maintain the effects to the wildlife resources at their current levels. Areas with potential for mineral development represent less than one percent of BLM-managed lands within the Ring of Fire planning area, and potential effects on wildlife and wildlife habitat would be minor. However, as OHV use remains unrestricted, moderate adverse effects to BLM-managed habitat, through loss of habitat and disturbance, could continue in high use areas such as the Knik River Flats. Minimal forestry activity (approximately 20 acres per year) and recreational activities along the road system may cause minor adverse effects to wildlife, but on an extremely local scale.

Alternative B – Resource Development for Wildlife

The management actions proposed under the various management categories of Alternative B would maintain the effects to the wildlife resources at their current levels. Designating all lands as “open” to OHV use may continue adverse effects to BLM-managed habitat in high use areas such as the Knik River drainage, through loss of habitat and disturbance. Boundaries of BLM-managed lands in relation to critical habitats should receive careful scrutiny before land transfers are approved. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to wildlife, but on an extremely local scale. With the revocation of ANCSA 17(d)(1) withdrawals, mineral exploration could increase; however areas that could be disturbed through mineral mining and oil and gas exploration and development represent less than one percent (2,618 acres) of BLM-managed lands within the Ring of Fire planning area. Potential effects on wildlife and habitat would generally be minor; however, unrestricted OHV use would continue to affect wildlife in specific areas such as the Knik River Valley. Only a small portion of the wildlife species found on BLM-managed lands could be adversely affected through loss of habitat and disturbance.

Alternative C – Resource Conservation for Wildlife

Effects to wildlife from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to wildlife, but on an extremely local scale. Any disturbance due to mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres), so consequently only a small portion of the wildlife species found on BLM-managed lands could be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation or habitat. Management actions, such as the establishment of SMAs, may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wildlife species or habitats, resulting in beneficial effects. The two SRMAs, primarily the Haines Block, would be managed to avoid adverse effects on wildlife resources.

Alternative D – Proposed Action for Wildlife

Effects to wildlife from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to wildlife, but on an extremely local scale and minor in magnitude. Any disturbance due to mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres), so consequently only a small portion of the wildlife species found on BLM-managed lands could be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Management actions, such as the establishment of SMAs, may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wildlife species or habitats, resulting in beneficial effects. The two SRMAs, primarily the Haines Block, would be managed to avoid adverse effects on wildlife resources.

4.4.3.4.3 Overall Cumulative Effects on Wildlife

Depending on scale and location, the combination of past, present, direct, indirect, and RFFA effects under all alternatives may continue to adversely affect wildlife resources. In particular, reasonably foreseeable timber harvest, mining, and transportation projects may result in site-specific loss or fragmentation of habitat, disturbance of wildlife species, and impediments to migratory patterns. Climate change and related changes to habitat may also affect the distribution and abundance of specific wildlife populations on a long-term basis. Given the scattered and unconsolidated nature of BLM lands, the relatively low level of forestry (approximately 20 acres annually on BLM-managed lands), mineral disturbance due to mining and oil and gas exploration and development (2,618 acres, or less than one percent of BLM-managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system), the relative contribution from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities, far outweighs the contribution of proposed management actions on a regional scale. There would be continued adverse effects of a currently unspecified magnitude from recreation activities, such as commercial helicopter tours on State-selected BLM lands, State lands, and USFS lands in the Haines area. In this region, commercial recreation permits from BLM may already contribute a larger proportion of impacts than activities by other managers. Another important instance of effects is the concentrated OHV use on BLM-managed lands and neighboring lands in the Knik River Valley. Under Alternatives C and D, the creation of the two SRMAs would contribute to beneficial cumulative effects in resolving use conflicts associated with OHVs (Knik River) and commercial

recreation helicopter tours (Haines Block). The estimated level of exploration, development and production of leasables minerals for all lands in the planning area (2,558 acres) is extremely small and unlikely to impact wildlife resource beyond localized areas. Less information is available to quantify potential disturbances on all lands in the planning area from locatable and salable mineral development, forestry, and other land use activities. The potential transportation corridor to Iniskin Bay, associated with the Pebble Mine may have localized effects on wildlife near the alignment.

4.4.3.5 Vegetation Resources

4.4.3.5.1 Past and Present Effects for Vegetation

Disturbances within the Alaska Peninsula/Aleutian Chain and Kodiak Island regions alpine tundra communities have resulted from community developments, military activities, cattle and reindeer grazing, fox farms and subsistence hunting. Mining activities require the removal of vegetation in the immediate vicinity of the claim, and may affect adjacent vegetation through edge effects or water quality issues. Access roads, utility corridors and electronic sites also require the removal of vegetation in the area of the footprint, and may stress adjacent vegetation by altering the surface and shallow subsurface flow of water.

Within the Southcentral region, climate change, bark beetle infestations, fire management, timber harvests, military activity, OHV use, and urban and suburban development have all contributed to changes in vegetation. Climate change, timber harvests, and mining activities have been sources of past and present effects on vegetation in southeast Alaska.

4.4.3.5.2 Summary of Direct and Indirect Effects by Alternative for Vegetation

Alternative A – Current Management for Vegetation

The current management actions under the Alternative A would maintain the effects to the vegetation resources at current levels. As OHV use continues to go unrestricted, adverse effects to BLM-managed vegetation resources through direct loss of habitat and the loss of habitat functions and values could continue, and result in moderate effects in areas of high use such as the Knik River valley. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation in localized areas. Any possible effects from renewable energy, recreation, or wildland fire and fuel management would be minimal, and would likely not extend to the regional level. Any disturbance due to mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the vegetation found on BLM-managed lands may be affected, and effects would be minor in magnitude.

Alternative B – Resource Development for Vegetation

The management actions proposed under the various management categories of Alternative B would result in effects on vegetation similar to Alternative A. Potential adverse effects from forestry (approximately 20 acres per year), renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. With the revocation of ANCSA 17(d)(1) withdrawals, mineral exploration could increase; however, areas with potential for disturbance from mineral and oil and gas development represent 2,618 acres, or less than one percent of BLM-managed lands within the Ring of Fire planning area. Consequently, only a small portion of the vegetation found on BLM-managed lands could be affected. Designating the planning area as “open” to OHV use would continue to create adverse effects to BLM-managed vegetation resources, similar to the current undesignated status, through direct loss of habitat and the loss of habitat functions and values. Adverse effects would generally be localized and minor in nature, except in high use areas such as the Knik River where moderate adverse effects to vegetation could occur.

Alternative C – Resource Conservation for Vegetation

Effects to vegetation from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation, unless appropriately mitigated. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the vegetation found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Some management actions, such as WSR designations and establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected vegetation resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative C may result in adverse effects to vegetation resources of a lesser extent and magnitude than Alternatives A, B, or D.

Alternative D – Proposed Action for Vegetation

Under Alternative D, adverse effects to vegetation from future management are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to vegetation. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (less than 2,618 acres); consequently only a small portion of the vegetation found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to vegetation. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected vegetation resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative D may result in adverse effects to vegetation resources of a lesser extent and magnitude than the current management activities.

4.4.3.5.3 Overall Cumulative Effects on Vegetation

Depending on scale and location, the combination of past and present actions, RFFAs, and direct and indirect effects considered under all alternatives may continue to adversely affect vegetation resources. In particular, climate change, timber harvesting, and mining projects would result in alteration of vegetation composition, removal of vegetation, and the availability and flow of surface water and groundwater. Although some management measures under all the alternatives may minimize or mitigate adverse effects on the vegetation resources of BLM-managed lands, continued adverse effects from recreation activities and OHV use, exploration, development and production of leasables, locatables, and salables, and other land use activities would likely offset mitigation to some degree. Alternatives C and D provide additional mitigation related to vegetation through development of ROPs and stipulations (Appendix D), limitations to OHV use, and future implementation planning in three specific areas. In addition to the direct and indirect effects of the proposed alternatives, economists predict that Alaska's population may continue to grow, likely increasing pressure on those BLM-managed lands within the public domain. Should current transportation plans discussed in Section 4.4.2 proceed as scheduled,

access to BLM-managed lands may also increase, along with increased pressure to utilize the surface and subsurface resources. Oil and gas leasing through the Cook Inlet and Alaska Peninsula Area Wide Oil and Gas Lease Sales may also increase construction of access roads, exploration, development, and production activities on lands adjacent to BLM.

The combination of past, present, direct, indirect, and RFFA effects under all alternatives may continue to adversely affect vegetation resources. Given the scattered and unconsolidated nature of BLM lands, the relatively low level of forestry (approximately 20 acres annually on BLM-managed lands), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system), the relative contribution of activities on BLM-managed lands to cumulative effects on vegetation would generally be minimal. The contribution to cumulative effects on vegetation from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of BLM-managed activities on a regional scale. Within specific, localized areas such as the Knik River, the level of OHV use on BLM-managed lands has a moderate contribution to cumulative effects on vegetation in the area. Future implementation planning proposed under Alternatives C and D would help reduce cumulative effects.

4.4.3.6 Wetlands-Riparian Resources

4.4.3.6.1 Past and Present Effects for Wetlands-Riparian

Disturbances to wetlands and riparian resources have resulted from climate change; commercial, industrial, and residential development; marine facilities; transportation facilities; and peat mining. These activities have resulted in localized vegetation changes, alteration of wetland hydrology, soil erosion, eutrophication of lakes, and the loss of wildlife habitat and ecological diversity throughout the Ring of Fire planning area. Regional changes to wetland and riparian vegetation is greatest in areas where urban development has expanded, such as the MOA, the Palmer-Wasilla area of the MSB, and the Kenai-Soldotna area of the Kenai Peninsula Borough.

4.4.3.6.2 Summary of Direct and Indirect Effects by Alternative for Wetlands-Riparian

Alternative A – Current Management for Wetlands-Riparian

The current management actions under Alternative A would maintain the effects to the wetland and riparian resources at current levels (although an increase would be expected with an increase in population). However, as BLM continues to allow OHV use and other recreational activities to go unrestricted, adverse effects to BLM-managed wetland and riparian resources through direct loss of habitat and the loss of habitat functions and values could continue. Any possible effects from renewable energy, recreation, or wildland fire and fuels management would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetlands and riparian resources found on BLM-managed lands may be affected. Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A would continue to adversely affect wetland and riparian resources in localized areas where development and managed activities are occurring.

Alternative B – Resource Development for Wetlands-Riparian

The management actions proposed under the various management categories of Alternative B would maintain the effects to the wetland and riparian resources at levels similar to Alternative A (although an increase would be expected with an increase in population). However, as OHV use continues to go unrestricted, adverse effects to BLM-managed wetland resources through direct loss of habitat and the loss of habitat functions and values could continue. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetlands and riparian resources found on BLM-managed lands may be affected.

Alternative C – Resource Conservation for Wetlands-Riparian

Effects to wetland and riparian resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of

the wetland and riparian resources found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to wetlands. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wetland and riparian resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative C may result in adverse effects to wetland resources of a lesser extent and magnitude than the current management activities.

Alternative D – Proposed Action for Wetlands-Riparian

Under Alternative D, effects to wetland and riparian resources from future management are likely to be limited in scale, or concentrated in specific areas. Any possible effects from renewable energy, recreation, or fire would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less); consequently only a small portion of the wetland and riparian resources found on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to wetland and riparian resources. Some management actions, such as the establishment of SMAs may restrict land use activities within these specific areas, and allow for additional protection and recovery of any previously affected wetland and riparian resources in localized areas. Available information described in the sections above indicate that the adoption of the management actions as described under Alternative D may result in adverse effects to wetland and riparian resources of a lesser extent and magnitude than the current management activities.

4.4.3.6.3 Overall Cumulative Effects on Wetlands-Riparian

Depending on scale and location, the combination of past, present, and RFFAs under all alternatives may continue to adversely affect wetland and riparian resources. In particular, climate change, timber harvesting, and mining projects would result in alteration of vegetation composition, removal of vegetation, and the availability and flow of surface and groundwater. Although some management measures under all the alternatives may minimize or mitigate adverse effects on the wetland and riparian resources of BLM-managed lands, continued adverse effects from recreation activities and OHV use, exploration, development and production of leasables, locatables, and salables, and other land use activities would likely offset mitigation to some degree. Site-specific activities, such as mineral exploration or commercial recreation, would require implementation plans that evaluate the environmental consequences of proposed activities, or a special permitting process. In addition to the direct and indirect effects of the proposed alternatives, economists predict that Alaska's population may continue to grow, likely increasing pressure on those BLM-managed lands within the public domain. All of these ongoing and proposed activities are likely to continue to adversely affect wetland and riparian resources within the Ring of Fire planning area, but on a localized scale, and in a more limited degree on BLM managed lands, and neighboring lands associated with BLM indirect effects. Most (greater than 98 percent) of BLM wetlands and riparian lands are in pristine condition. BLM is currently assessing the condition of these areas and emphasizing restoration of those found to be in impaired condition. All surface disturbing activities that would affect wetlands would be regulated by the United States Environmental Protection Agency (USEPA) and the United States Army Corps of Engineers (USACE).

4.4.3.7 Visual Resources

4.4.3.7.1 Past and Present Effects for Visual

Visual resources throughout the Ring of Fire planning area are affected annually by new developments associated with population growth, even though these effects are not always obvious to the casual observer. Within the Alaska Peninsula/Aleutian Chain region, military activities, mining activities, and the construction of access roads and utility corridors have all had localized effects on specific areas of the visual landscape. In the Kodiak Region, changes have resulted largely from community and military developments along the road system. In the Southcentral region, disturbances to visual resources have resulted from commercial, industrial, and residential development, the development of marine and transportation facilities (primarily along the road system), and from unrestricted recreational OHV use in high use areas such as the Knik River Valley. Disturbances to the visual resources of the Southeast region have resulted primarily from timber harvests and commercial, industrial, and residential development in the vicinity of existing communities. In general, given the scattered and unconsolidated nature of BLM-managed lands, adverse effects have been localized and minimal on a regional scale.

4.4.3.7.2 Summary of Direct and Indirect Effects by Alternative for Visual

Alternative A – Current Management for Visual

The management actions proposed under Alternative A would have a variety of effects on visual resources occurring on BLM-managed lands. Management would maintain any effects on visual resources at their current expected levels, given that current management does not establish VRM classifications. As OHV use continues to go unrestricted, minimal adverse effects to BLM-managed visual resources may continue, primarily in areas of high use such as the Knik River. Mineral and oil and gas exploration and development, and the creation of new ROWs both have the potential to adversely affect visual resources, however any effects would likely be minimal based on the limited potential for disturbance due to mining and oil and gas exploration and development on BLM-managed lands within the planning area (2,618 acres or less). Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A may have localized, adverse effects on visual resources.

Alternative B – Resource Development for Visual

Effects on visual resources use from management proposed under Alternative B would primarily be limited to a small portion of BLM-managed lands. All lands under Alternative B would be managed as VRM Class IV, which would allow actions that make major modifications to the existing character of the landscape (Figures 2.4-1 through 2.4-4). OHV use would continue to be undesignated on all lands within the Ring of Fire planning area, and may create changes in the existing landscape character and access to visual resources. Effects from forestry, ROWs, mining, and mineral disturbance due to mining and oil and gas exploration and development would likely be limited in extent; consequently only a small portion of recreation use on BLM-managed lands may be affected (2,618 acres or less). Stipulations or ROPs associated with mineral exploration and development may contain protections for visual resources in specific locations. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative B would have minimal effects on visual

resources, and effects would be on a very localized scale, primarily in high OHV use areas, such as the Knik River.

Alternative C – Resource Conservation for Visual

Effects to visual resources from management proposed under Alternative C are likely to be limited in scale, or concentrated in specific areas. The Neacola Mountains ACEC, the Halibut Cove Forest Study Area (Figure 2.4-5), and the Lake Carlanna Municipal Watershed (Figure 2.4-6) would be designated as VRM Class II. Changes in the existing landscape for these areas would be low and not attract attention. BLM-managed lands within the remainder of the planning area would be designated as VRM Class III. All lands within the Ring of Fire planning area would be designated as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the visual setting in high OHV-use areas such as the Knik River SRMA. Effects from forestry (approximately 20 acres per year), ROWs, mining, oil and gas would likely be limited in extent; consequently only a small portion of visual resources on BLM-managed lands may be affected, and those effects would be minimal. Resources would receive further levels of protection through the development of implementation plans in the three proposed SMAs, and would be managed to meet their outlined objectives (Appendix F). Fourteen river segments were identified as eligible, but not suitable for WSR designation. ORVs associated the scenic values of these river segments would be taken into consideration when evaluating proposed actions in these areas. The majority of these actions would minimize or mitigate adverse effects on visual resources through increased protections and regulation efforts. Actions that may adversely affect the visual landscape would only occur on a small portion of BLM-managed lands.

Alternative D – Proposed Action for Visual

Effects to visual resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas, such as the proposed SMAs. The Lake Carlanna Municipal Watershed (Figure 2.4-9) and the Halibut Cove Forest Study Area (Figure 2.4-8) would be managed as VRM Class II, where changes to the landscape character should be low, and not readily visible to the casual observer. The Neacola Mountains ACEC would be designated as VRM Class II as well. The remainder of BLM-managed lands within the planning area would be designated as VRM Class IV, which generally allows major modifications to the existing character of the landscape. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the visual landscape in high OHV-use areas, such as the proposed Knik River SRMA. Effects from forestry, ROWs, mining, and mineral disturbance due to mining and oil and gas exploration and development would likely be limited in extent (2,618 acres or less); consequently only a small portion of visual resources on BLM-managed lands may be affected. Resources would receive further levels of protection through the development of implementation plans in the three SMAs, and would be managed to meet the objectives of the specific SMAs (Appendix F). The majority of these actions would have beneficial effects on visual resources through increased protections and regulation efforts. Actions that may adversely affect the visual landscape would only occur on a small portion of BLM-managed lands.

4.4.3.7.3 Overall Cumulative Effects on Visual

Past alterations to visual resources in each of the four regions have resulted from community or military development, commercial or industrial developments, military activities, mining and oil and gas activities, the development of marine and transportation facilities, unrestricted recreational OHV use, timber harvests, or the construction of access roads and utility corridors.

The primary differences between direct and indirect effects of the alternatives are the designation of VRM Classes, management of OHV use, and designation of SMAs where management of visual resources would be further refined. Alternatives C and D provide some additional mitigation related to visual resources through the development of ROPs and stipulations (Appendix D), limitations to OHV use, and future implementation planning in three specific areas designated as SMAs. However, given the relatively low level of forestry (20 acres annually on BLM-managed lands), mineral and oil and gas disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system), the contribution to cumulative effects on visual resources from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of BLM management actions on a regional scale. Within specific, localized areas such as the Knik River, the level of high OHV use has had a moderate contribution to cumulative effects on visual resources. Future implementation planning under Alternatives C and D would help reduce BLM management action contributions to cumulative effects.

There are several different RFFAs proposed for the Ring of Fire planning area that may all contribute to adverse cumulative effects on visual resources unless mitigated in their planning efforts (Section 4.4.2 for detailed descriptions). Naturally occurring events, such as volcanic eruptions, earthquakes, landslides, avalanches, wildland fires, or floods, may lead to changes in the existing visual resources, as could development resulting from population growth. In general, construction of access roads, gravel pads, and facilities may alter the visual landscape and access to important viewpoints. Roads and highway projects may also have an adverse affect on visual resources of the region by altering basic visual elements of form, line, color, and texture. Increases in commercial recreation would allow increased visitor access to new viewpoints. The effects of RFFAs on BLM-managed lands would vary with respect to location, duration, extent, and magnitude throughout the Ring of Fire planning area.

4.4.3.8 Paleontological Resources

4.4.3.8.1 Past and Present Actions for Paleontological Resources

Disturbances to paleontological resources in specific areas have resulted from mining and oil and gas projects, transportation projects, construction of facilities, and military activities along the road system. Timber harvest and wildland fires have potentially affected paleontological resources in specific areas as well.

4.4.3.8.2 Summary of Direct and Indirect Effects by Alternative for Paleontological Resources

Alternative A – Current Management for Paleontological Resources

Effects to paleontological resources from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so the chance that any known paleontological resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations on a case-by-case basis. As OHV use remains unrestricted, adverse effects to paleontological resources could result through damage to surface features, especially in heavy use areas, such as the Knik River. Adverse effects from forestry and recreation use would likely be to small acreages.

Alternative B – Resource Development for Paleontological Resources

Effects to paleontological resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. Adverse effects from forestry (potentially on approximately 20 acres per year) and recreation use would likely be to small acreages and minor in scale. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, the RFDs (Appendix G) for oil and gas development, predict a total of 2,558 acres of potential disturbance. Up to 60 acres of surface disturbance is predicted through the development of locatable minerals. It is unlikely that any salable mineral extraction would occur on BLM-managed lands. All such development would be subject to ROPs, stipulations, and project-specific mitigation measures. Any adverse effects to paleontological resources from mineral development would be unlikely due to the low development potential. By designating all BLM-managed lands as “open” to OHV use, adverse effects could result through damage to surface paleontological resources, especially in heavy use areas, such as the Knik River.

Alternative C – Resource Conservation for Paleontological Resources

Effects to paleontological resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which could reduce any adverse effects to known paleontological resources occurring in high OHV-use areas such as the Knik River SRMA. Effects from forestry (potentially on approximately 20 acres per year), ROWs, mining, and oil and gas developments (2,558 acres of oil and gas potential disturbance, up to 60 acres of locatable potential disturbance), and recreation use would occur on a very localized scale. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Paleontological resources would receive further levels of protection through the development of implementation plans and ROPs, if any are

known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F).

Alternative D – Proposed Action for Paleontological Resources

Effects to paleontological resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, which could reduce any adverse effects to paleontological resources occurring in high OHV-use areas such as the Knik River SRMA. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, effects from forestry (potentially on 20 acres per year), ROWs, mining, and oil and gas developments (2,558 acres of oil and gas potential disturbance, up to 60 acres of locatable potential disturbance), and recreation use would occur on a very localized scale. SRMAs are identified in the Knik River and the Haines Block. An ACEC is identified in the Neacola Mountains. Paleontological resources would receive further levels of protection through the development of implementation plans and ROPs, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F).

4.4.3.8.3 Overall Cumulative Effects on Paleontological Resources

Disturbances to paleontological resources in localized areas have resulted from mining and oil and gas projects, transportation projects, forestry, recreation activities, construction of facilities, and military activities throughout the Ring of Fire planning area. Future development activities associated with transportation projects, mineral exploration, and population growth may have long-term, adverse effects on paleontological resources, depending on the location and magnitude of the activity, and adoption and effectiveness of mitigation measures. Natural events, such as landslides, earthquakes, and floods also have the potential to permanently damage or destroy paleontological resources.

Any direct or indirect effects from mining, oil and gas, road development, or recreation, resulting in surface disturbing activities such as road construction, riverbank and bluff erosion, or trail cutting, would likely be to small acreages, so the likelihood that any known paleontological resources would be adversely affected is low. Effects would be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. As OHV use remains unrestricted or open (Alternatives A and B), adverse effects to paleontological resources could result, especially in heavy use areas, such as the Knik River, although paleontological resources in these areas are not fully known. Alternative B would provide additional guidance and protection through ROPs and stipulations.

However, in Alternatives C and D, the opportunity for additional protection measures for paleontological resources would be provided through limiting OHV use, creating three SMAs, and designating certain areas as closed to mineral development. Given the relatively low level of forestry (approximately 20 acres annually), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands) and recreation use, the contribution to cumulative effects on paleontological resources from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of proposed management actions on a regional scale. Within specific localized areas such as the Knik River, the contribution of high OHV use has a moderate contribution to cumulative effects in the area. Future implementation planning proposed under Alternatives C and D would help to reduce cumulative effects.

4.4.3.9 Cultural Resources

4.4.3.9.1 Past and Present Actions for Cultural Resources

Natural forces have affected the condition of cultural resources; tectonic shifts and post-glacial uplift may have changed the altitude of beaches, putting some former beachfront sites high above current sea level, while sinking other beaches below the current sea level. Physical disturbances or damage to cultural resources have also resulted from mining and oil and gas projects, transportation projects, construction of facilities, and military activities in specific areas throughout the Ring of Fire planning area. The Southcentral region supports the largest human population in the State, and the cultural resources in the larger urban areas have been affected by transportation projects, construction of facilities, and recreation-related activities. Timber harvest and wildland fires have potentially affected cultural resources as well.

4.4.3.9.2 Summary of Direct and Indirect Effects by Alternative for Cultural Resources

Alternative A – Current Management for Cultural Resources

Effects to cultural resources under Alternative A are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less), and the chance that any known cultural resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations. As OHV use remains unrestricted, adverse effects to cultural resources could result through damage to surface archaeological or cultural resources, especially in heavy use areas, such as the Knik River. Adverse effects from forestry and recreation use would likely be limited in extent.

Alternative B – Resource Development for Cultural Resources

Effects to cultural resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. However, an inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. Adverse effects from forestry and recreation use would likely be limited in extent. The disposal or acquisition of lands may adversely or beneficially affect culturally important places. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be limited in extent (2,618 acres or less), so the chance that any known cultural resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations, ROPs and stipulations. As OHV use remains unrestricted, adverse effects to cultural resources could result through damage to surface archaeological or cultural resources, especially in heavy use areas, such as the Knik River.

Alternative C – Resource Conservation for Cultural Resources

Effects to cultural resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which could reduce any adverse effects to cultural resources occurring in high OHV-use areas such as the Knik River SRMA. Effects from forestry, ROWs, mining, and oil and gas developments, and recreation use would occur on a very localized scale, and would be subject to ROPs and stipulations. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Cultural resources would receive further levels of protection through the development of implementation plans, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Visual class designations would be made on all BLM-managed lands, a few of which would be managed under VRM Class II, maintaining the existing visual character around potential cultural resources in these areas.

Alternative D – Proposed Action for Cultural Resources

Effects to cultural resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis. BLM would designate all lands as “limited” to OHV use, which could reduce any adverse effects to cultural resources occurring in high OHV-use areas such as the Knik River SRMA. While this alternative would revoke ANCSA 17(d)(1) withdrawals and allow for mineral exploration of additional lands, effects from forestry, ROWs, mining, and mineral disturbance due to mining and oil and gas exploration and development, and recreation use would occur on a very localized scale. Exploration and development activities would be subject to ROPs and stipulations. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Cultural resources would receive further levels of protection through the development of implementation plans, if any are known in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). VRM Class designations would be made on all BLM-managed lands, a few of which would be managed under VRM Class II, maintaining the existing visual character around potential cultural resources in these areas. The remainder of BLM lands would be classified as VRM Class IV, providing less protection for the visual context of cultural resources.

4.4.3.9.3 Overall Cumulative Effects on Cultural Resources

Disturbances to cultural resources in localized areas have resulted from mining and oil and gas exploration and development, transportation projects, forestry, recreation activities, construction of facilities, and military activities throughout the Ring of Fire planning area. Future reasonably foreseeable development activities associated with transportation projects, mineral exploration, and population growth may have long-term, adverse effects on cultural resources, depending on the location and magnitude of the activity, and adoption and effectiveness of mitigation measures. Natural events, such as landslides, earthquakes, and floods also have the potential to permanently damage or destroy cultural resources.

Management actions proposed under Alternative A would maintain the effects to cultural resources at its current levels. Any forestry, mining, oil and gas, road development, or recreation, resulting in surface disturbing activities such as road construction, riverbank and bluff erosion, or trail cutting, would likely be limited in extent; the chance that any known cultural resources would be adversely affected is low. Effects from development operations could also be mitigated through Plans of Operations. As OHV use remains unrestricted, adverse effects to cultural resources could result through damage to surface archaeological or cultural resources, especially in heavy use areas, such as the Knik River. Adverse effects from forestry and recreation use would likely be limited in extent. However, an inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources relative to Section 106 of the NHPA would be conducted prior to any undertaking on a case-by-case basis.

The primary differences between direct and indirect effects of alternatives are the management designations associated with OHV use, and the identification of SMAs (Alternatives C and D) where management of cultural resources present within those areas would be further refined. Alternatives B, C and D provide some additional benefits related to cultural resources through development of ROPs and stipulations, and limitations to OHV use. Alternatives C and D call for future implementation planning in three specific areas, providing additional management guidance.

Given the relatively low level of forestry (approximately 20 acres annually on BLM-managed lands), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands) and recreation use, the contribution to cumulative effects on cultural resources from RFFAs such as climate change, timber sales, transportation, mining, and other recreation activities far outweighs the contribution of proposed BLM management actions on a regional scale. Within specific localized areas such as the Knik River, the contribution of high OHV use has a moderate contribution to cumulative effects in the area. Future implementation planning under Alternatives C and D would help to reduce cumulative effects to cultural resources within the boundaries of the three SMAs.

4.4.4 Cumulative Effects for Resource Uses

4.4.4.1 Lands and Realty

4.4.4.1.1 Past and Present Effects for Lands and Realty

Changes in land tenure have occurred as a result of the Alaska Statehood Act of 1958 (which required that 103,350,000 acres of federal land be conveyed to the State), the Native Allotment Act 1906, ANCSA, Alaska National Interest Lands Conservation Act (ANILCA), FLPMA, and the R&PP Act.

A number of federal laws and actions influenced the current status of land authorizations in the Ring of Fire planning area.

- Section 906(k) of ANILCA: BLM must receive concurrence from the State of Alaska, prior to authorizing uses on lands selected by the State.
- According to 43 CFR §2650.1(a)(2)(i), when land use applications are received that affect lands under application by Native corporations, BLM is required to consult with concerned regions or villages and consider their views.
- The majority of the land base for Elmendorf Air Force Base (EAFB) and Fort Richardson Army Post (FRAP) is public land that is withdrawn and managed by the military for military use EO 8102.

Individual applications for use of BLM-managed lands associated with mining, oil and gas, and transportation projects have resulted in some changes in tenure, primarily leases and ROWs in specific areas.

4.4.4.1.2 Summary of Direct and Indirect Effects by Alternative for Lands and Realty

Alternative A – Current Management for Lands and Realty

Under Alternative A, lands and realty authorizations would continue to occur on a case-by-case basis; no lands would be specifically identified for sale. The continuation of ANCSA 17(d)(1) withdrawals would have a moderate adverse cumulative effect on availability of public land for mineral use, although the potential for reasonably foreseeable mineral and oil and gas disturbance is limited (2,618 acres or less). Access for OHV would remain undesignated for BLM managed lands, and activities within the Knik River area would contribute to adverse effects on habitat, adjacent land use, and public safety.

Alternative B – Resource Development for Lands and Realty

Under Alternative B, four specific small parcels would be offered for sale (Table 2.3-1), and the revocation of ANCSA 17(d)(1) withdrawals could result in an increase in lands and realty authorizations. However, the potential for mineral and oil and gas disturbance is considered low (2,618 acres or less).

All BLM managed lands in the planning area would be designated as open to OHV access, which is effectively similar to Alternative A. All lands within the Ring of Fire planning area would be managed under VRM Class IV, which is the least restrictive classification. No new SMAs would be designated.

Alternative C – Resource Conservation for Lands and Realty

Under Alternative C, no lands would be identified for sale within the planning area, and effects would be similar to Alternative A. Emphasis would be placed on acquisition of land from willing landowners within the proposed Knik River SRMA, the Haines Block SRMA, the Neacola Mountains ACEC, and the Iditarod NHT. ANCSA 17(d)(1) withdrawals would remain under Alternative C; until conveyance of selected land is settled, the amount of unselected lands open to fluid and solid mineral leasing would be reduced compared to Alternative B. In addition, four specific areas on unselected lands and four areas on selected lands would be closed to fluid mineral leasing (Table 2.3-2).

All BLM-managed land in the Ring of Fire planning area would be limited for OHV access to existing and designated trails, consistent with State regulations on *Generally Allowed Uses on State Lands* (Appendix E). Within the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC, limitations would be further refined to meet the objectives of the SMAs (Appendix F). The Neacola ACEC, Halibut Cove Forest Study Area and Lake Carlanna Municipal Watershed would be managed as VRM Class II, and the Knik River SRMA as VRM Class IV. All other BLM lands with the planning area would be managed as VRM Class III. Wildlife values would be further addressed in the development of special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC.

Alternative D – Proposed Action for Lands and Realty

A total of eight small parcels have been identified for sale in the planning area, totalling approximately eight acres (Table 2.3-1). Revocation of ANCSA 17(d)(1) withdrawals could result in an increase in lands and realty authorizations, although specific areas would remain closed to mineral entry. However, the potential for mineral disturbance is considered limited given the small number of acres designated as having high mineral development potential on BLM-managed lands (2,618 acres or less). The Mountain Goat Monitoring and Control Area within the Haines Block SRMA would be identified as an avoidance area for issuance of ROW authorizations. All lands in the Ring of Fire planning area would be designated as limited to existing roads and trails to OHV use, with additional direction to be developed under implementation plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC. The Lake Carlanna Municipal Watershed and Halibut Cove Forest Study Area would be managed as VRM Class II, the Neacola Mountains ACEC would be managed as VRM Class II, and the rest of the planning area would be managed as VRM Class IV. Wildlife values would be further addressed in the development of special management plans for the Knik River SRMA, the Haines Block SRMA, and the Neacola Mountains ACEC.

4.4.4.1.3 Overall Cumulative Effects on Lands and Realty

Under all alternatives, cumulative effects resulting from reasonably foreseeable future lands and realty management actions, mineral exploration/development/production, commercial recreation, and transportation projects would result in some minor site-specific changes to land tenure, land authorizations, and coordination of land use plans and landowners. Depending on funding and project approval, development of the Pebble Mine (within the boundaries of the neighboring Bay RMP/EIS planning area) and transportation projects on the Alaska Peninsula and west side of Cook Inlet could result in additional land tenure adjustments associated with transportation and utility ROWs. Other changes in land tenure are expected to continue at current rates until 2009, or until all selected lands have been settled. Land authorizations would

be expected to increase slightly as population and development increase over the extent of this plan.

The primary differences between direct and indirect effects of alternatives are the designation of VRM classes, management of OHV use, revoking ANCSA 17(d)(1) withdrawals, and identification of SMAs where management of lands and realty actions would be further refined. Alternatives B, C and D provide some direction to lands and realty management through limitations to OHV uses through the implementation of ROPs and stipulations. Alternatives C and D would implement future implementation planning in three specific areas, providing further direction to lands and realty management.

Given the scattered and unconsolidated nature of BLM lands, the relative contribution of activities on these lands to cumulative effects would generally be minimal, with four exceptions. The continuation of ANCSA 17(d)(1) withdrawals would have a minor adverse cumulative effect on availability of public land for mineral entry, although revoking the withdrawals would not substantially increase mineral and oil and gas development due to the limited potential on BLM-managed lands within the planning area (2,618 acres or less of potential disturbance). The nature of OHV activity on BLM-managed lands within the Knik River area contribute to cumulative adverse effects on habitat, adjacent land use, and public safety. Construction of the Pebble Mine may require use of BLM lands for access to a Cook Inlet port site, contributing to adverse cumulative effects from mining and associated transportation, but improving regional transportation access.

In light of the relatively low level of forestry (20 acres annually), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system) on BLM-managed lands within the planning area, the contribution to cumulative effects on land and realty actions of RFFAs such as resolution of land conveyance, timber sales, transportation, oil and gas and mining, and other recreation activities far outweighs the contribution of BLM managed activities on a regional scale. Within specific localized areas such as the Knik River, the contribution of high OHV use on BLM managed lands has a moderate contribution to cumulative effects in the area; special management planning under Alternatives C and D would help reduce cumulative effects.

4.4.4.2 Leasable Minerals

Descriptions of past and present events with respect to leasable minerals in the Ring of Fire planning area are presented in the *Mineral Potential Report* (Appendix G) and are summarized below.

4.4.4.2.1 Past and Present Effects for Leasable Minerals

Descriptions of past and present events with respect to oil and gas, and CBNG in Southcentral region are presented in the *Mineral Potential Report* (Appendix G). Cook Inlet basin has had a history of oil and conventional gas exploration and development dating back to the 1950s. Approximately 270 exploration wells have been drilled, and 26 oil and gas fields discovered in the basin to date. Fifteen fields are currently producing in the onshore portions of Cook Inlet Basin, eight of which have federal mineral interests (Appendix G, Table 2). The State of Alaska continues to hold oil and gas lease sales in Cook Inlet.

There has been much interest in CBNG in the Matanuska-Susitna Valley area in the past decade, driven by gas demand and State leasing incentives. A State test well and several industry exploration wells were drilled in the 1990s. Two pilot tests recently conducted at the Pioneer Unit, although initially promising, were considered not capable of commercial production. Exploration for CBNG continues currently in Susitna Valley.

Land status and the implications of federal and State legislation have had a major effect on areas that have been open to mineral exploration and development, including ANCSA, ANILCA, and State legislation related to CBNG.

4.4.4.2.2 Summary of Direct and Indirect Effects by Alternative for Leasable Minerals

Alternative A – Current Management for Leasable Minerals

Under this alternative, mineral development is unlikely due to low mineral development potential (2,618 acres or less) (Appendix G).

Alternative B – Resource Development for Leasable Minerals

Under this alternative, ANCSA 17(d)(1) withdrawals would be revoked, and some additional lands would be open to mineral exploration. However, mineral development is unlikely due to low mineral development potential (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. VRM Class IV management would be prescribed for all lands, and would have minimal adverse effects to development practices.

Alternative C – Resource Conservation for Leasable Minerals

Under this alternative, mineral development is unlikely due to land status and mineral potential (Appendix G). ANCSA 17(d)(1) withdrawals would be retained, and some small areas would be closed to mineral development (Table 2.3-2). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface

disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. Designation of the Haines Block, Knik River, and Neacola Mountains SMAs could result in additional restrictions on mineral development within those areas. VRM Classes would be recommended for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas, thus making development all the less likely.

Alternative D – Proposed Action for Leasable Minerals

Under this alternative, ANCSA 17(d)(1) withdrawals would be revoked, and some additional lands would be open to mineral exploration. However, mineral development is unlikely due to low mineral development potential (Appendix G). Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). Total surface disturbance within the Ring of Fire planning area for all ownerships of projected short-term oil and gas exploration and development, including CBNG, is 2,558 acres. Designation of the Haines Block, Knik River, and Neacola Mountains SMAs could result in additional restrictions on mineral development within those areas. VRM Classes would be designated for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

4.4.4.2.3 Overall Cumulative Effects on Leasable Minerals

Industry interest in the exploration and development of oil and gas, and CBNG in Cook Inlet Basin is expected to continue over the next 10 to 15 years irrespective of BLM mineral leasing decisions. Most activities would take place on non-BLM lands, given the limited oil and gas development potential for all lands in the region (2,558 acres or less of disturbance). The contribution of proposed management actions to cumulative effects would be greatest under alternatives with greater access to federal mineral estate (Alternatives B and D) due to the revocation of ANCSA 17(d)(1) withdrawals. Future external actions, such as building the Knik Arm Bridge (Section 4.4.2), and general road improvements throughout the basin, are expected to reduce exploration and/or development costs, which may increase overall oil and gas activities. Increased exploration and/or development restrictions as a result from of VRM classifications, and/or designation of three SMAs, would have greater effects under Alternatives C and D. However, mineral potential may not be highest in areas with these restrictions. Therefore, adoption of the management actions as described under each of the alternatives, combined with past and present actions, and RFFAs could have minimal adverse effect on leasable minerals within the Ring of Fire planning area under Alternatives C and D, and any such effects would be on a local scale.

4.4.4.3 Locatable and Salable Minerals

4.4.4.3.1 Past and Present Effects for Locatable and Salable Minerals

Descriptions of past and present events with respect to locatable and salable minerals in the Ring of Fire planning area are presented in the *Mineral Potential Report* (Appendix G, Sections 3.2 and 3.3) and are summarized below.

Locatable Minerals

Alaska Peninsula/Aleutian Chain and Kodiak Regions

Although a number of significant locatable mineral deposits have been identified in the Alaska Peninsula/Aleutian Chain and Kodiak regions of the Ring of Fire planning area, these areas have received relatively little past exploration interest due to their remoteness and inaccessibility. There are no active mining claims in the Aleutian Islands. The Apollo Mine, which produced gold ore in the early 1900s, is the only active State claim in the Alaska Peninsula region. Placer gold claims (State) are located on the western and southern beaches of the Kodiak Islands. There are no federal claims in these regions.

Southcentral Region

The Southcentral region is traversed by several mineralized regions and mining districts which have experienced a history of prospecting and mining. Numerous State and federal claims are located in the Yentna-Petersville area, the northern Talkeetna Mountains, the Hatcher Pass-Willow Creek mining district, the Girdwood-Hope area, and in northwestern Prince William Sound (PWS). These areas have had a history of gold mining from placer and lode deposits since the early 1900s. In addition, chromite was produced in the 1940s and 1950s from a deposit in the southern Kenai Mountains. Currently, gold production continues on a localized scale in the Girdwood area, and mineral exploration is being conducted in the Susitna Valley and Chugach National Forest (CNF).

Southeast Region

A number of mineralized areas in the Southeast region have historically produced gold and other metallic minerals from lode and placer deposits since the late 1800s. Numerous claims are held in the Haines-Klukwan area; the Juneau Gold Belt and Admiralty Island; Chichagof and Baranof Islands; on Woewodski, Zarembo, and Kupreanof Islands in the Stikine area; on Prince of Wales and nearby islands in the Ketchikan Mining District; and on the mainland near Hyder, the Cleveland Peninsula, and Misty Fjords National Monument. The industrial mineral barite was produced from a mine in the Petersburg area since the 1960s. Recent exploration and mapping has been conducted throughout southeast Alaska. Currently, there are mining development activities ongoing at the Greens Creek and Kensington mines in the Juneau-Admiralty area, and placer production from one mine in the Klukwan area of southeast Alaska.

Salable Minerals

Sand and gravel has been, and is currently, an important commodity in Alaska, ranking only behind oil and gas in value to the State's economy. Past production in the Ring of Fire planning area has largely been project driven, with peaks occurring during periods of military construction, discoveries of oil and gas fields in Cook Inlet, and urban growth in the Anchorage

and Matanuska-Susitna Valley area. There are currently 13 private producers of aggregate in the Southcentral region and five in the Southeast region.

Most past production of building stone within the Ring of Fire planning area has been from limestone and marble quarries in the Southeast region, although several stone pits have been documented on Kodiak and in the Southcentral region. Marble production began in the early 1900s and declined after World War II. More recently, limestone quarries have been used to build and maintain gravel logging roads in the region.

4.4.4.3.2 Summary of Direct and Indirect Effects by Alternative for Locatable and Salable Minerals

Alternative A – Current Management for Locatable and Salable Minerals

Existing locatable mineral activities that would continue under Alternative A would slightly reduce overall locatable mineral reserves. Some localized salable mineral activities in areas with no existing extraction sites in the Alaska Peninsula and the Southcentral region (Chignik, Iliamna and Iniskin Bays) would continue to occur.

Alternative B – Resource Development for Locatable and Salable Minerals

Locatable mineral activities would reduce overall locatable mineral reserves in the Ring of Fire planning area, although the amount of mineral development is projected to continue at the relatively low current levels. ANCSA 17(d)(1) withdrawals would be revoked. Salable mineral effects under Alternative B would be the same as Alternative A. VRM Class IV management would be prescribed for all lands, and would have minimal adverse effects to development practices.

Alternative C – Resource Conservation for Locatable and Salable Minerals

Under this alternative, mineral development is unlikely due to land status and mineral potential (Appendix G). ANCSA 17(d)(1) withdrawals would remain in place, continuing to withdraw these lands from mineral entry. Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). VRM Classes would be recommended for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

Alternative D – Proposed Action for Locatable and Salable Minerals

Under this alternative, mineral development is unlikely due to selected land status and low mineral potential (Appendix G). ANCSA 17(d)(1) withdrawals would be revoked. Any permitted or leasing activities would have to comply with guidelines outlined in the stipulations and ROPs (Appendix D). VRM Classes would be designated for certain lands, potentially increasing the level of restrictions placed on mineral exploration and development in these areas.

4.4.4.3.3 Overall Cumulative Effects on Locatable and Salable Minerals

The effects of surface disturbance on BLM-managed lands, which are projected to be balanced all or in part by reclamation, would be compounded by external mineral exploration/development, transportation, and power projects in the Southcentral and Southeast regions, which would encourage locatable mineral activities region-wide. Effects from these combined

activities would have net adverse cumulative effects on the environment through surface disturbance and reduction of mineral reserves. These effects are expected to be less in extent (by about 100 acres) under Alternatives A and C, than under Alternatives B and D.

Most mineral development would take place on lands other than those managed by BLM, given the low development potential outlined in Appendix G. Effects from salable mineral activities predicted under Alternatives A, B, and D for BLM-managed lands in the Alaska Peninsula and Southcentral regions, would be compounded by external transportation projects and minerals leasing in these regions. These activities may cause adverse cumulative effects through land disturbance and reduction in salable mineral reserves. No salable mineral activities are predicted on BLM-managed lands under Alternative C, or in the Kodiak or Southeast regions under Alternatives A, B, and D. Thus, adverse cumulative effects would be the result of the externally initiated RFFAs alone.

Increased exploration and/or development restrictions as a result of VRM classifications would have greater effects on Alternatives C and D. However, mineral potential may not be highest in areas with these restrictions. Therefore, adoption of the management actions as described under each of the alternatives, combined with past and present actions, and RFFAs may have minimal adverse effect on locatable and salable minerals within the Ring of Fire planning area under Alternatives C and D, although any effects would be on a local scale.

4.4.4.4 Off-Highway Vehicles

4.4.4.4.1 Past and Present Effects for Off-Highway Vehicles

Outside of the Campbell Tract facility, there are no OHV use restrictions or designations on BLM-managed lands within the Ring of Fire planning area. Use levels throughout the State are rising due to an increasing population, a growing interest in outdoor recreational opportunities, rising disposable income for use on recreational pursuits, and advances in vehicle technology. Limitations in areas that are suitable for, or open to OHV use continues to put pressure on relatively accessible and popular OHV destinations within the planning area such as the Knik River Flats. State legislation is currently proposed to maintain State lands within the Knik River area as open to OHV use.

4.4.4.4.2 Summary of Direct and Indirect Effects by Alternative for Off-Highway Vehicles

Alternative A – Current Management for Off-Highway Vehicles

Management proposed under Alternative A would maintain any effects on OHV use at their current levels. There are no OHV designations in place within the Ring of Fire planning area at this time, and use is allowed on all types of terrain. Through the acquisition of lands and easements, more lands may become available for OHV use, though these actions are not common within BLM. Management guidelines or stipulations related to fish and aquatic habitat, wetlands and riparian vegetation, and wildlife may contain limitations on OHV use in certain areas. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative A would have minimal effects on OHV use, and effects would be on a very localized scale.

Alternative B – Resource Development for Off-Highway Vehicles

Effects on OHV use from future management under Alternative B would most likely occur along the existing road network, and would primarily be limited to a small portion of BLM-managed lands. Lands would be designated as “open” to OHV use on all lands within the Ring of Fire planning area. Effects from forestry (less than 20 acres per year), ROWs, mining, and mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres) would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative B would have minimal effects on OHV use, and effects would be on a very localized scale.

Alternative C – Resource Conservation for Off-Highway Vehicles

Effects to OHV use from future management under Alternative C are likely to be minor in scale, or concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the recreation setting in high OHV-use areas such as the proposed Knik River SRMA. Effects from forestry, ROWs, mining, and oil and gas developments, would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection

through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). All of these actions may have some minor adverse effects on OHV use on BLM-managed lands, relative to the current management actions, by decreasing the amount of lands available for OHV use, or increasing restrictions.

Alternative D – Proposed Action for Off-Highway Vehicles

Effects to OHV use from future management under Alternative D are likely to be limited in scale, and concentrated in specific areas. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E), which may provide changes in the recreation setting in high OHV-use areas such as the proposed Knik River SRMA. Effects from forestry (approximately 20 acres per year), ROWs, mining, and mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres) would likely be limited in extent; consequently only a small portion of OHV use on BLM-managed lands may be affected. SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Resources would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). SRMA implementation plans for the Knik River could result in areas specifically being designated as open, limited, or closed to OHV use. All of these actions may have adverse effects on OHV use on BLM-managed lands, relative to the current management actions, by decreasing the amount of lands available for OHV use, or increasing restrictions.

4.4.4.4.3 Overall Cumulative Effects on Off-Highway Vehicles

OHV use on BLM lands within the Ring of Fire has been unregulated to date. RFFAs such as the Knik Arm Crossing, the Juneau Access project, timber sales, and mining projects may create additional access to lands through the development of new access points and routes, providing additional lands for recreational OHV use. The RFFAs within the Ring of Fire planning area vary with respect to location, duration, and magnitude, but may all contribute to an overall greater effect on OHV use through development of additional ROWs, access, and designation of areas “open” to OHV use. The management actions proposed under Alternatives A and B would maintain any effects on OHV use at their current levels. Therefore, available information described in Section 4.3.2, combined with past and present actions, and RFFAs, indicate that the adoption of the current management actions as described under Alternatives A and B would have a slightly lower level of restrictive cumulative effects on OHV use within the Ring of Fire planning area, when compared to the closer management of OHV use in the SMAs recommended under Alternatives C and D.

Under Alternatives C and D, the designation of all lands as “limited” to OHV use, would occur. In addition, three SMAs are designated, and subsequent implementation plans developed that would evaluate the environmental consequences of site-specific activities (including OHV use). All of these actions may limit OHV use on BLM-managed lands, relative to the current management actions, by decreasing the amount of lands available for OHV use, or increasing restrictions. The majority of these effects would be localized. Cumulatively, the level of OHV use on all lands within the region would remain the same or increase pending State legislation. Management planning for the Knik River SRMA could allow current levels of use while mitigating adverse effects of OHV use to some degree.

4.4.4.5 Recreation

4.4.4.5.1 Past and Present Effects for Recreation

Unconsolidated land ownership patterns and changing land ownership of parcels have complicated recreation management in the Ring of Fire planning area. There has been a limited level of BLM recreation management in the planning area due to the remote, scattered nature of the land base and land tenure status. In general, recreation resource conditions are highly dependent on the health of harvestable resources (i.e., fish and game) and available facilities and use areas. This relationship revolves around recreation access from the existing road system.

The increased use of helicopters for commercial recreation purposes, and the demand for increased access has prompted the need to examine management techniques such as designating exclusive use areas, establishing Monitoring Control Areas, no-fly zones, and rotating flight patterns. In the Haines/Skagway area, concerns over helicopter use include: effects on mountain goat populations, stress on other wildlife species, and effects on residential populations and other recreation users seeking solitude in areas that also accommodate helicopter-related recreation activities.

The Knik River Valley area is owned and managed by a variety of public and private entities. Both motorized and non-motorized use levels in the area have increased, occasionally leading to user conflicts.

4.4.4.5.2 Summary of Direct and Indirect Effects by Alternative for Recreation

Alternative A – Current Management for Recreation

Management proposed under Alternative A would maintain any effects on recreation at their current levels. Campbell Tract is the only SMA currently identified within the Ring of Fire planning area. Through the acquisition of lands and easements, a small amount of lands may become available for recreation use. Commercial recreation activity is currently limited by permit. Some conflicts between motorized and non-motorized recreation users may occur in the Knik River valley. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative A may have minor effects on recreation.

Alternative B – Resource Development for Recreation

There would be no new SMAs established within the Ring of Fire planning area. Through the acquisition of lands and easements, more lands may become available for recreation use. The revocation of ANCSA 17(d)(1) withdrawals would allow for the leasing of fluid minerals, and for the exploration and development of locatable and salable minerals on certain lands. Stipulations or other permit requirements around mineral exploration and development may have adverse effects on recreation use and access through restrictions in specific locations, and in other cases protect recreation uses and activities. However, given the low mineral development potential on BLM-managed lands (2,618 acres or less of disturbance), effects would be minor. Recreation use may also be restricted in areas where there are conflicts with wildlife management objectives. Some conflicts between non-motorized recreation use and OHV use may occur in the Knik River valley. Available information described in the sections above indicates that the adoption of the management actions as described under Alternative B may

have a minimal adverse effect on recreation use, and would be dispersed throughout the planning area.

Alternative C – Resource Conservation for Recreation

SRMAs are identified in the Knik River and the Haines Block, and an ACEC is identified in the Neacola Mountains. Recreation resources and uses would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Additional mineral leasing restrictions that may, among other things, limit or protect recreation use would be put in place for certain sensitive or unique areas. However, given the low mineral development potential on BLM-managed lands (2,618 acres or less of disturbance), effects would be minor. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E). While some of these actions may adversely affect recreation, such as increasing restrictions on use or access in certain areas, the majority of the actions proposed under Alternative C would have beneficial effects on recreation use, access, and the preservation of recreation settings relative to current management actions.

Alternative D – Proposed Action for Recreation

SRMAs are identified in the Knik River (Figure 2.3-5) and the Haines Block (Figure 2.3-4), and an ACEC is identified in the Neacola Mountains. Resources, particularly wildlife, would receive further levels of protection through the development of implementation plans in these areas, and would be managed to meet the objectives of the specific SMAs (Appendix F). Additional mineral leasing restrictions that may, among other things, limit or protect recreation use, would be put in place for certain sensitive or unique areas. However, given the low mineral development potential on BLM-managed lands (2,618 acres or less of disturbance), effects would be minor. BLM would designate all lands as “limited” to OHV use, following ADNR’s *Generally Allowed Uses on State Lands* (Appendix E). While some of these actions may adversely affect recreation, such as increasing restrictions on use or access in certain areas, the majority of the actions proposed under Alternative D would have beneficial effects on recreation use, access, and the preservation of recreation settings relative to current management actions.

4.4.4.5.3 Overall Cumulative Effects on Recreation

The Campbell Tract is the only SMA designated within the Ring of Fire planning area to date. RFFAs include recreation projects, mineral development, timber harvest, and transportation and utility development projects (see to Section 4.4.2). All of the proposed projects have the potential to change recreation settings, recreation access, and availability of recreation resources. In addition, as the population within the Ring of Fire planning area continues to increase, it is assumed that recreation use would also increase, especially in the Southcentral and Southeast regions. Some of this increase would be on BLM-managed lands. Generally, recreation settings would shift to less primitive recreation classifications with increasing development and motorized access proposals.

The primary differences between direct and indirect effects of alternatives are the designation of VRM Classes, management of OHV use, and designation of SMAs where management of recreation uses would be further refined. Alternatives B, C and D provide some additional protection to recreation resources and activities through development of ROPs and stipulations. Alternatives C and D would limit OHV use, and establish special management planning in three

specific areas. However, compared to the magnitude of RFFAs such as mineral and oil and gas development, and transportation projects, the relative contribution of BLM actions to cumulative effects would be minor. Given the relatively low level of recreation use on BLM-managed lands (unconsolidated parcels with larger blocks located off of the existing road system) within the planning area, the contribution to cumulative effects on recreation use due to the availability of other federal and State lands for recreation far outweighs the contribution of BLM managed activities on a regional scale. Within specific localized areas such as the Knik River and Haines Block, recreation activities on BLM managed lands, in conjunction with activities on other public lands, combines with uses on neighboring lands to create a moderate level of adverse cumulative effects in the area. Special management planning proposed under Alternatives C and D would help reduce the BLM contribution to adverse cumulative effects on recreation resources and uses.

4.4.5 Special Designations

4.4.5.1 Special Management Areas

4.4.5.1.1 Past and Present Effects for Special Management Areas

The Campbell Tract Facility was designated as an SRMA in 1988 and is managed under the Campbell Tract Facility Management Plan. The Iditarod NHT was designated in 1978 and is managed under the Iditarod National Historic Trail Comprehensive Management Plan (BLM 2003b). Only portions of the Iditarod NHT are in the Ring of Fire planning area.

The Neacola Mountains in the Southcentral region of the planning area have undergone evaluations and were found to meet the relevance and importance criteria for an ACEC. The Knik River in the Southcentral region and the Haines Block in the Southeast region were identified as SRMAs because of the recreational uses and wildlife values that occur there. Both ACECs and SRMAs are identified and designated through the PRMP/FEIS planning process.

4.4.5.1.2 Summary of Direct and Indirect Effects by Alternative for Special Management Areas

Alternatives A and B for Special Management Areas

No new SMAs are proposed or designated under Alternatives A and B.

Alternative C – Resource Conservation for Special Management Areas

Under Alternative C, Knik River and Haines Block are managed as SRMAs and the Neacola Mountains is managed as an ACEC. The special recreational values and scenic quality attributes in these areas, prompt SMA designations. Objectives outlined for these three areas can be seen in Appendix F.

Alternative D – Proposed Action for Special Management Areas

Under Alternative D, Knik River and Haines Block are managed as SRMAs and the Neacola Mountains is managed as an ACEC. The special recreational values and scenic quality attributes in these areas, prompt SMA designations. Objectives outlined for these three areas can be seen in Appendix F.

4.4.5.1.3 Overall Cumulative Effects on Special Management Areas

There have not been past effects to the SMAs that are pertinent to the analysis of cumulative effects. RFFAs could contribute to adverse effects to the values associated with the proposed SMAs, unless properly mitigated. If adopted, the SMAs would be protected via permits, implementation plans, ROPs and stipulations, and there would be no adverse cumulative effects anticipated. There is currently a State legislative proposal to establish the Knik River area as a State motorized recreation area. Should this legislation be enacted, BLM would coordinate future SRMA implementation planning with this effort.

4.4.5.2 Wild and Scenic Rivers

4.4.5.2.1 Past and Present Effects for Wild and Scenic Rivers

There are no designated WSRs in the Ring of Fire planning area.

4.4.5.2.2 Summary of Direct and Indirect Effects for Wild and Scenic Rivers

Alternatives A, B, and D for Wild and Scenic Rivers

No river segments would be designated as WSRs under these alternatives.

Alternative C – Resource Conservation for Wild and Scenic Rivers

Effects to any of the eligible river segments for WSR designation under Alternative C are likely to be limited in scale, or concentrated in specific areas. Effects from forestry (approximately 20 acres per year), land conveyance, mining, and disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands) would likely be limited, and may not overlap with river corridors; consequently potential effects would be minimal. OHV use would be designated as limited to existing roads and trails, possibly contributing to a reduction in seasonal adverse effects where they occur in eligible WSR corridors.

4.4.5.2.3 Overall Cumulative Effects on Wild and Scenic Rivers

There are no designated WSRs within the Ring of Fire planning area. There have not been past effects on the rivers identified as eligible for WSR designation under Alternative C that are within the scope of the analysis of cumulative effects. There are several RFFAs proposed for the Ring of Fire planning area that could contribute to adverse effects to the values associated with these eligible WSR segments, unless mitigated. Most applicable RFFAs would increase recreational use around river corridors. Commercial recreation permits, primarily in the Southeast region, have been increasing; activities could alter values associated with certain river segments that have been afforded wild and/or scenic river designations under Alternative C. Given the unresolved land status, it is unclear which eligible river segments will remain under BLM management.

Portions of 14 rivers were identified as eligible for designation as WSRs under Alternative C, but were not determined suitable for designation as WSRs.

The following river segments were identified as eligible for WSR designation:

- **Alaska Peninsula/Aleutian Chain Region:** Barbara and Reindeer creeks (Figure 2.3-6)
- **Kodiak Region:** Elbow Creek (Figure 2.3-6)
- **Southcentral Region:** Eagle River-South Fork, Chilligan River, Iniskin River, Ursus Cove Complex, Kirschner Lake Complex, and McArthur River (Figure 2.3-7)
- **Southeast Region:** Chilkat, Chilkoot, Tsirku, and Tahini rivers, and the Chilkoot Powersite (Figure 2.3-8)

ORVs within these areas would receive some degree of consideration when reviewing proposed actions that might have an effect on ORVs identified for these river segments. No adverse cumulative effects on ORVs within WSR corridors designated as eligible under Alternative C are anticipated

4.4.6 Social and Economic

4.4.6.1 Socioeconomic

4.4.6.1.1 Past and Present Effects for Socioeconomics

A variety of factors have historically influenced socioeconomics in the Ring of Fire planning area, including access, population growth, environmental conditions, military activities, and extractive resource industries. Both population and employment have continued to increase in the project area, with the greatest growth occurring in the MOA and MSB areas. Government revenue has also generally increased, although as revenue from oil and gas development has declined, sales and property taxes have increased.

4.4.6.1.2 Summary of Direct and Indirect Effects by Alternative for Socioeconomics

Alternative A – Current Management for Socioeconomics

Effects to socioeconomic resources from future management under Alternative A are likely to be limited to a very small portion of BLM-managed lands, and would most likely occur along the existing road network. Small areas of forestry (approximately 20 acres per year) or mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM-managed lands) may cause beneficial economic effects on a minimal, localized scale. Beneficial economic effects could also be felt through continued undesignated OHV use, especially in popular recreation areas such as the Knik River Valley.

Alternative B – Resource Development for Socioeconomics

Effects to socioeconomic resources from future management under Alternative B are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per year) or mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) may cause beneficial economic effects on a minimal, localized scale. While revocation of ANCSA 17(d)(1) withdrawals could open additional lands to mineral exploration, the amount of additional mineral development is expected to be limited. Beneficial economic effects through local expenditures could also be felt through continued undesignated OHV use, especially in popular recreation areas such as the Knik River.

Alternative C – Resource Conservation for Socioeconomics

Effects to socioeconomic resources from future management under Alternative C are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per year) or mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) may cause beneficial economic effects on a minimal, localized scale. Some beneficial economic effects from increased recreation expenditures could also be seen from SMA designations. Minor adverse economic effects from reductions in expenditures could potentially be felt through the limiting of OHV use, especially in popular recreation areas such as the Knik River.

Alternative D – Proposed Action for Socioeconomics

Effects to socioeconomic resources from future management under Alternative D are likely to be limited to a very small portion of BLM-managed lands, and are most likely to occur along the road network. No environmental justice issues would be created as a result of the management actions proposed under this alternative. Small areas of forestry (approximately 20 acres per year) or mineral disturbance due to mining and oil and gas exploration and development (up to 2,618 acres total) may cause beneficial economic effects on a minimal, localized scale. While revocation of ANCSA 17(d)(1) withdrawals could open additional lands to mineral exploration, the amount of additional mineral development is expected to be limited. Beneficial economic effects from additional recreation expenditures could also be seen from SMA designations. Minimal adverse economic effects from reductions in expenditures could potentially be felt through the limiting of OHV use, especially in popular recreation areas such as the Knik River.

4.4.6.1.3 Overall Cumulative Effects on Socioeconomics

The combination of past, present, and RFFAs under all alternatives may continue to affect socioeconomic characteristics of the Ring of Fire planning area. Small areas of forestry or mineral development may cause some increased economic effects through employment and expenditures on a minimal, localized scale. Under Alternatives C and D, increased economic effects through expenditures could result from SMA designations. Minimal adverse economic effects through reductions in expenditures could potentially be felt under these same alternatives through the limiting of OHV use, especially in popular recreation areas such as the Knik River. However, any economic effects resulting from proposed actions would be at a modest scale, extremely hard to detect within the planning area as a whole.

Given the relatively low level of forestry (20 acres annually), mineral disturbance due to mining and oil and gas exploration and development (less than one percent of BLM managed lands), and recreation use (unconsolidated parcels with larger blocks located off of the existing road system) on BLM-managed lands within the planning area, the contribution to cumulative effects on socioeconomic characteristics of RFFAs such as timber sales, transportation, mining, and other recreation activities far outweighs the contribution of BLM managed activities on a regional scale.

4.4.6.2 Subsistence

4.4.6.2.1 Past and Present Effects for Subsistence

Subsistence uses of local resources sustained Alaska Native communities for centuries, with intricate patterns of adaptation to local ecological settings in each Alaska Native culture. Contact history through the Russian, Territorial, and early Statehood eras brought very distinct impacts to different parts of Alaska. However, by the 1960s and 1970s Alaska Natives organized statewide movements to advocate for settlement of their land rights based in aboriginal title and to protect their contemporary reliance on subsistence for economic, social, and cultural purposes. Detailed information on historic trends and contemporary subsistence use patterns for each of the four planning regions is found in Section 3.5.6. This section considers selected broad trends that may affect subsistence uses in the planning region.

While direct management of subsistence harvests on federal lands rests with the Federal Subsistence Board and is not a BLM function, land management activities by the BLM can affect subsistence resources and uses. In addition, as a participating agency in the federal subsistence management program BLM can serve in the role of issue identification through ongoing consultation communities near BLM lands. This includes the potential to learn from the communities of their Local and Traditional Knowledge of these resources to provide insights regarding species' condition, numbers, behavior, and any observed changes to these species. As noted in the discussion of direct and indirect effects, BLM actions have generally limited and localized impacts. This section examines the potential for non BLM initiated RFFAs to have impacts on subsistence activities on BLM-managed lands, including both federally defined subsistence uses on the unencumbered lands and state-defined subsistence uses on the selected lands under BLM management. Many cumulative effects derive not from BLM actions, but from the general course of economic development throughout Alaska. Growth in competition from non-subsistence resource users could reduce access to and availability of subsistence resources on BLM-managed and adjacent lands. For example, the largest block of BLM-managed land in the Southeast region is the State-selected Haines Block, which supports the subsistence uses of several communities and may be subject to pressure from other resource uses.

Reduction in access may be caused by restrictions to OHV and aircraft use and regulation of resource users, although Section 811 of ANILCA protects access for subsistence users, including the use of snowmachines and other means of surface transportation traditionally employed. Increases in competition caused by improved access for resource users could affect subsistence users' ability to provide for their communities' food needs, could have an adverse effect on subsistence traditions for harvests of those species, and could result in a loss of connection to those lands.

Population growth is most acute in the Southcentral region, as suburban development follows the Parks and Glenn highways through formerly rural areas, displacing some subsistence resources and activities, and adversely affecting others by reductions in habitat and increased mortality (e.g., vehicle collision, domestic dog harassment, stream and lake siltation). For the region as a whole, population growth and differences in the financial capacity to purchase and operate highly efficient transportation technologies are contributing to competition for resources and potential displacement of subsistence users. However, the major blocks of BLM-managed land in the Southcentral region are too remote from the communities to be affected. The Knik River parcel of Alaska Native corporation selected land is affected by this trend, and is

encompassed within the southcentral rural community subsistence use areas displayed in Figure 3.5-3 (Appendix A).

4.4.6.2.2 Summary of Direct/Indirect Effects by Alternative for Subsistence

Alternative A – Current Management for Subsistence

The management actions proposed under the various management categories of Alternative A would have a variety of effects on the subsistence use and resources occurring on BLM-managed lands, but effects on subsistence uses would generally continue at current levels. Minimal forestry activity (approximately 20 acres per year) may cause minor, site-specific adverse effects to subsistence, unless appropriately mitigated. Any possible effects from BLM fisheries and wildlife programs, or fire management would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. However, as BLM continues to allow OHV use and other recreational activities to go unrestricted, adverse effects to subsistence users and resources could continue in localized instances. Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative A would have a minimal adverse effect on subsistence resources.

Alternative B – Resource Development for Subsistence

The management actions proposed under the various management categories of Alternative B would maintain the effects to the subsistence use at its current levels (although an increase would be expected with an increase in population). Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to subsistence, unless appropriately mitigated. Any possible effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or associated road development, if it were to occur, would likely be to small acreages (2,618 acres or less), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. Changes to land withdrawal status could have unforeseen effects to subsistence resources, and unrestricted OHV use could cause habitat changes due to overuse of routes, trail braiding, and the deflection of subsistence resources by the motion and noise of OHVs. Available information described in the sections above indicates that the adoption of the current management actions as described under Alternative B would have a minimal adverse effect on subsistence resources.

Alternative C – Resource Conservation for Subsistence

Effects to subsistence resources from future management under Alternative C are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (approximately 20 acres per year) may cause adverse effects to subsistence, unless appropriately mitigated. Any possible effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres total), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to subsistence use and resources. Some management actions,

such as the establishment of SMAs may provide additional protections to subsistence resources and recovery for any previously affected resources, resulting in a beneficial effect. However, where recreational access increases, competition for subsistence resources may also increase. Available information described in the sections above indicates that the adoption of the management actions may result in adverse effects to subsistence use and resources of a lesser extent and magnitude than the current management activities. Some management actions, such as the establishment of SMAs would restrict land use activities and allow for the recovery of previously affected vegetation resources in localized areas, resulting in a beneficial effect. Adverse effects could be highlighted, and subsequently mitigated through close coordination with subsistence users during the implementation planning phase of certain areas.

Alternative D – Proposed Action for Subsistence

Effects to subsistence resources from future management under Alternative D are likely to be limited in scale, or concentrated in specific areas. Minimal forestry activity (less than 20 acres per year) may cause adverse effects to subsistence, unless appropriately mitigated. Any possible effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or road development, if it were to occur, would likely be to small acreages (up to 2,618 acres total), so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. OHV use would be designated as limited to existing roads and trails, contributing to a reduction in seasonal adverse effects to subsistence use and resources. Some management actions, such as the establishment of SMAs may provide additional protections to subsistence resources and recovery for any previously affected resources, resulting in a beneficial effect. However, where recreational access increases, competition for subsistence resources may also increase. Available information described in the sections above indicates that the adoption of the management actions may result in adverse effects to subsistence use and resources of a lesser extent and magnitude than the current management activities. Some management actions, such as the establishment of SMAs would restrict land use activities and allow for the recovery of previously affected vegetation resources in localized areas, resulting in a beneficial effect. Adverse effects could be highlighted, and subsequently mitigated against, through close coordination with subsistence users during the implementation planning phase of certain areas.

4.4.6.2.3 Overall Cumulative Effects on Subsistence

Cumulative effects to subsistence resources and practices are premised upon loss of access, reduced availability, and increased competition for those resources over time. The Southeast and Southcentral regions are most likely to experience adverse effects to subsistence resources and users as part of ongoing development and change in those areas. Areas just outside the Alaska Peninsula/Aleutian Chain region would be subject to changes because of the Pebble Mine and planned transportation infrastructure, primarily on State lands. Future potential exploration and development of minerals, potential hydroelectric and coal fired power system sites, and ongoing residential and recreational land development along roads and waterways of the State will increase the likelihood of ongoing access conflicts. Private landowners may choose to limit access to their lands, reducing the ability of subsistence users to get to their traditional harvesting areas. Federal and State land designations may not allow subsistence users access, or may limit that access to non-motorized subsistence hunter access.

The combination of past, present, reasonably foreseeable effects and effects under all alternatives may continue to adversely affect subsistence use and resources. Any possible

direct or indirect effects from fisheries, fire, or wildlife would be minimal, and would likely not extend to the regional level. Any disturbance from potential mining, oil and gas, or road development, if it were to occur, would likely be to small acreages, so consequently only a small portion of the subsistence resources and use on BLM-managed lands may be affected. Under Alternatives C and D, the limiting of OHV use, and the designations of three SMAs could restrict land use activities and allow for the recovery of previously affected subsistence resources in localized areas, resulting in a beneficial effect. For example, the Haines Block represents an area in which helicopter supported recreation is controversial and has the potential to affect resources of interest to local subsistence users. In the Knik River area, growing OHV use has potential to adversely affect resources. The special management area provisions would be important in managing these potential effects. Any adverse effects could be highlighted, and subsequently mitigated against, through close coordination with subsistence users during the implementation -planning phase of certain areas. The relative contribution of BLM management actions to overall effects would be minor. RFFAs such as mineral and oil and gas development, transportation projects, and competition for resources from an increasing population, may have an overall adverse effect on subsistence resources and uses on the BLM-managed and adjacent lands within the Ring of Fire planning area. However, given the generally limited and dispersed location of BLM-managed lands, cumulative effects would be minimal and would most likely not extend to the regional scale.

4.5 Irreversible and Irretrievable Commitment of Resources

CEQ guidelines (40 CFR 1502.16) require an analysis of irreversible and irretrievable commitment of resources. An irreversible commitment of resources generally applies to non-renewable resources, such as minerals or cultural resources, and constitutes the loss of future production options. It also applies to those factors that are renewable only over long time spans, such as oil productivity. Irretrievable commitment of resources constitutes the loss of opportunities to realize resource potential during the period of the proposed action. This may include the loss of production, harvest, or use of other renewable resources. These decisions may be reversible, but the utilization opportunities foregone are irretrievable.

4.5.1 Resources

4.5.1.1 Physiography, Geology, and Geomorphology

Rather than evaluate the effects of the alternatives on the geologic and geomorphic features of the Ring of Fire planning area, this section evaluates the effects of natural geologic events (e.g., landslides, volcanoes, avalanches, etc.) on the man-made and biological environment. Therefore an evaluation of the irreversible and irretrievable commitment of these resources is not applicable.

4.5.1.2 Soils

Activities occurring within the Ring of Fire planning area under all alternatives may affect soils through compaction, change in aggregate stability, and loss of organic matter. The direct, indirect, and cumulative effects analyses under all alternatives identified mining, recreation, OHV use, and forestry as activities that may adversely affect soil resources, and which may also have irreversible and irretrievable effects.

4.5.1.3 Wetlands and Riparian Areas

Wetland and riparian areas may be adversely affected by a number of development projects and other activities considered in the cumulative effects analyses. Because wetland and riparian habitats are often more sensitive to change relative to upland vegetation, rehabilitation takes longer and is more costly. Wetland and riparian areas provide important functions and values for the ecosystem, and often provide unique habitats in a region. Thus, the activities that may occur in the Ring of Fire planning area under all alternatives may have localized irreversible and irretrievable effects on the wetlands and riparian resources, although regional loss of wetland and riparian habitats is not expected to be substantial.

4.5.1.4 Visual Resources

Activities analyzed in the direct, indirect, and cumulative effects analyses may affect the visual resources found throughout the Ring of Fire planning area under all alternatives through a change in the existing landscape character and/or change in access to important viewpoints. The following activities may affect these visual resources: community, military, commercial and industrial developments, military activities, mining activities, development of marine and transportation facilities, OHV use, timber harvests, and construction of access roads and utility corridors. These actions may adversely affect the visual resources, and in some cases, these effects may be irreversible and irretrievable.

4.5.1.5 Cultural Resources

Development activities, such as mining, construction of access roads and utility corridor, and other ground-disturbing activities have the potential to adversely affect cultural and historical resources. Displacement of archaeological resources could affect the cultural and scientific value of the resource. Adverse effects to known and unknown cultural and historical materials have a greater likelihood to accumulate if use, and development of an area occurs and that use increases in duration, extent, and intensity over time. An inventory of cultural resources, identification of effects, and mitigation of effects on cultural resources under current federal and State regulations would be conducted prior to any proposed action in an effort to avoid any irreversible or irretrievable effects to this resource.

4.5.1.6 Paleontological Resources

Development activities, such as mining, construction of access roads and utility corridor, and other ground-disturbing activities have the potential to adversely affect paleontological resources. Displacement of paleontological resources could affect the cultural and scientific value of the resource. Adverse effects to known and unknown paleontological materials have a greater likelihood to accumulate if use, and development of an area occurs and that use increases in duration, extent, and intensity over time. An inventory of paleontological resources, identification of effects, and mitigation of effects on paleontological resources under current federal and State regulations would be conducted prior to any proposed action in an effort to avoid irreversible and irretrievable effects to this resource.

4.5.2 Resource Uses

4.5.2.1 Lands and Realty

Under Alternatives C and D, IAPs developed for SMAs may preclude certain activities, which may irretrievably commit certain resources. Whether or not the commitment of these resources is irreversible is dependent upon the amount of time lands are designated as SMAs.

4.5.2.2 Leasable Minerals

Alternatives A – Although BLM-managed lands currently closed to leasing would remain closed under Alternative A, lands that are currently leased would continue to be used for oil and gas production. The effects from these activities are irreversible and irretrievable in that the continued production gradually reduces the remaining oil and gas reserves on BLM-managed and adjacent lands.

Alternative C – Under Alternative C, 241,000 acres of unselected lands would become available for mineral leasing, in addition to lands that are currently leased that would continue to be used for oil and gas production. The effects from these activities are irreversible and irretrievable in that the continued production gradually reduces the remaining oil and gas reserves on BLM-managed and adjacent lands.

Alternatives B and D – BLM would recommend the revocation of ANCSA 17(d)(1) withdrawals and allow mineral leasing on lands retained in federal ownership under Alternatives B and D. New oil, gas, and CBNG development under this alternative, combined with continued

operations on existing fields, would cause an irreversible and irretrievable reduction in remaining reserves on BLM-managed and adjacent lands.

4.5.2.3 Locatable Minerals

Alternatives A and C – Some lands would be made available for locatable mineral entry under Alternative A and C. However, new developments would be minimal. The effects of ongoing mining activities in the Southcentral and Southeast regions on BLM-managed and adjacent lands would gradually decrease the remaining mineral reserves, and cause an irreversible and irretrievable commitment of those resources.

Alternatives B and D – The revocation of ANCSA 17(d)(1) withdrawals to allow for locatable mineral leasing would cause minimal irreversible or irretrievable commitments of the locatable mineral reserves on BLM-managed and adjacent lands in the Alaska Peninsula/Aleutian Chain, Southcentral and Southeast regions.

4.5.2.4 Salable Minerals

BLM-administered surface and split-estate lands are currently available for exploration and development of salable minerals. Future demands for aggregate and road construction maintenance may increase the demands on salable minerals located on BLM-managed lands through development of new extraction sites. This would cause an irreversible and irretrievable commitment of salable mineral resources on BLM-managed and adjacent lands in the Alaska Peninsula/Aleutian Chain and Southcentral regions.

4.5.2.5 Recreation

Recreation patterns on BLM-managed lands may be beneficially or adversely affected by the management actions proposed and by activities considered during the cumulative effects analysis. The removal of lands from the public domain, restrictions associated with mineral developments, and limitations establishments in IAPs may irreversibly and irretrievably commit those lands to other non-recreational uses. Other activities considered during the cumulative effects analysis that may adversely affect recreation patterns include mining, transportation projects, timber harvests, and other development. Upon completion of such projects, land may again be available to the public domain. However, because these activities would likely extend beyond the next 10 to 15 years, such activities are considered to have an irreversible and irretrievable affect on the recreation patterns within the Ring of Fire planning area.

4.5.3 Social and Economic Environment

4.5.3.1 Socioeconomics

Economic productivity could be stimulated in the planning area via extractive and/or non-extractive industries that are promoted under Alternatives B and D. Consequently, an increase in economic activity could stimulate population changes in the planning area. This increase in population could either enhance the social environment or increase social pressures. This may result in either beneficial or adverse irreversible and irretrievable effects on the social and economic human environment within the Ring of Fire planning area.

4.5.3.2 Subsistence

Activities considered in the direct, indirect, and cumulative effects analyses that may reduce the quality or affect the users ability to conduct subsistence activities on BLM-managed and adjacent lands include mining, timber harvests, transportation projects, access roads, utility corridors, and recreation activities. Some of these actions would irreversibly and irretrievably reduce the suitability or completely remove the ability of users to harvest subsistence resources.

4.6 Relationship Between the Local Short-term Uses and Maintenance and Enhancement of Long-term Productivity

This section discusses the short-term effects under the Proposed Action (Alternative D) of potential management and use of BLM-managed lands in the Ring of Fire planning area with regard to the maintenance and enhancement of potential long-term productivity of environmental resources on BLM-managed lands. Short-term refers to the total duration of resource use and associated activities, whereas long-term refers to an indefinite period beyond the termination of such uses and activities. The primary resource management actions, uses, and activities authorized by this PRMP/FEIS that will result in local short term uses include:

- Land and realty actions – sale of small specific parcels and revocation of ANCSA 17(d)(1) withdrawals;
- Potential for development of leasable, locatable, and salable minerals – based on mineral development potential, and revocation of ANCSA 17(d)(1) withdrawals that open additional lands to mineral entry;
- Designation of lands as “limited” to OHV use – additional guidance will be provided in specific areas through the completion of implementation-level plans;
- Commercial recreation – management of commercial recreation activities, particularly helicopter landings, with additional guidance to be provided in specific areas through the completion of implementation-level plans; and
- Designation of SMAs – designation and development of subsequent implementation-level plans for two SRMAs (Haines Block and Knik River) and an ACEC (Neacola Mountains).

4.6.1 Resources

BLM-managed resources affected by the Ring of Fire PRMP/FEIS include air, soils, water resources, fish and aquatic habitat, wildlife, vegetation, wetlands-riparian, visual resources, paleontological resources, and cultural resources. Short-term uses of BLM-managed resources associated with the sale of small parcels of land, none of which are important for other resources values, would result in a small acreage of land leaving federal ownership, and would have a minor effect on long-term productivity. Revocation of ANCSA 17(d)(1) withdrawals, potential development of leasable, locatable, and salable minerals, and designation of lands as “limited” to OHV use would result in some minor degradation or resource loss of air quality, water resources, fish and aquatic habitat, wildlife, vegetation, wetlands-riparian, visual resources, paleontological resources, and/or cultural resources. However, the relatively small acreages of disturbance from potential mineral development (approximately 2,618 acres, or less than one percent of BLM-managed lands), and limitations placed OHV use would have a minor effect on long-term productivity of BLM-managed lands in the planning area. Designation and development of subsequent implementation-level plans for two SRMAs (Haines Block and Knik River) and an ACEC (Neacola Mountains) would evaluate measures to reduce potential adverse effects on long-term productivity resulting from the “limited” OHV use designation and commercial recreation.

4.6.2 Resource Uses

BLM-managed resources uses and programs include lands and realty, leasable minerals, locatable and salable minerals, OHV, and recreation. Management uses and activities would result in the sale of several small parcels of BLM-managed lands, and some long-term reduction mineral resources, although the amount of lands affected by sale and development are less than one percent of BLM-managed lands in the planning area. OHV limitations and the designation and development of subsequent implementation plans for two SRMAs (Haines Block and Knik River) and an ACEC (Neacola Mountains) would evaluate measures to reduce potential adverse effects on long-term productivity on recreations uses.

4.6.3 Social and Economic Environment

Socioeconomic and subsistence characteristics and activities would potentially be affected by resource management actions, uses, and activities authorized by this PRMP/FEIS. Sale of lands, resource development, and commercial recreation activities would result in some short-term gains in employment and income in the planning area, and could generate revenue to local government. Effects on long-term productivity would be minor, given the relatively limited amount of potential mineral development on BLM managed-lands.

In the short term, some minor redistribution, reduction, or displacement of subsistence species and activities could occur. Given the relatively small area with potential for disturbance from mineral development, and that the proximity of potential resource development to subsistence use areas is generally distant, potential effects on long-term productivity would be minor.

4.7 Unavoidable Adverse Effects

Unavoidable adverse effects are those direct effects “that cannot be avoided” through project redesign, mitigation measures, or the selection of an environmentally superior alternative, or effects that remain following the implementation of mitigation measures (40 CFR 1502.16). Some unavoidable adverse effects occur as a result of the proposed management under one or more of the alternatives, while others result from public use of BLM-managed lands within the Ring of Fire planning area. While these activities that occur on BLM-managed lands may adversely affect the physical, biological, and/or social environment, the effects of site-specific activities would be assessed in future implementation plans. Table 4.7-1 identifies the unavoidable adverse effects by resource category.

Table 4.7-1. Unavoidable Adverse Effects

| Resource | Unavoidable Adverse Effect(s) |
|---|---|
| Resources | |
| Air Resources | Mining, OHV use, recreation activities, forestry, and other development activities managed under lands and realty may adversely affect air resources by increasing pollutant levels in the atmosphere. The effects of site-specific activities would be evaluated in implementation plans in an effort to minimize unavoidable adverse effects. |
| Soils | Recreation and OHV use, timber harvests, mining, and other development activities may adversely affect soils by causing soil compaction, increased soil erosion, and loss of topsoil and organics. |
| Water Resources | Mining, OHV use, recreation activities, forestry, and other development activities managed under lands and realty may adversely affect water resources. The effects of site-specific activities would be evaluated in implementation plans in an effort to avoid unavoidable adverse effects. |
| Fisheries and Aquatic Habitat | Activities that may occur under the management actions outlined under the proposed alternatives may have unavoidable adverse effects; however the effects of site-specific activities would be evaluated in implementation plans. |
| Wildlife and Wildlife Habitat | Activities that may occur under the management actions outlined under the proposed alternatives may have unavoidable adverse effects; however the effects of site-specific activities would be evaluated in implementation plans. |
| Special Status Species | Due to the regulations and protective measures in place to avoid adverse effects on threatened, endangered, and sensitive species, it is unlikely that any unavoidable effects would occur in association with the proposed alternatives. The effects of site-specific activities would be evaluated in implementation plans. |
| Vegetation | Activities that may occur under the management actions outlined under the proposed alternatives may have unavoidable adverse effects; however the effects of site-specific activities would be evaluated in implementation plans. |
| Wetlands-Riparian | Activities that may occur under the management actions outlined under the proposed alternatives may have unavoidable adverse effects; however the effects of site-specific activities would be evaluated in implementation plans. |
| Visual | Activities that may occur under the management actions outlined under the proposed alternatives may have unavoidable adverse effects; however the effects of site-specific activities would be evaluated in implementation plans. |
| Paleontological Resources | Mining, forestry, OHV use, recreation activities and other development may cause physical damage to the cultural and scientific value of paleontological resources. |
| Cultural Resources | Mining, forestry, OHV use, recreation activities and other development may have adverse effects on the NHRP eligibility of cultural resources, and/or may cause physical damage to such resources. |
| Resource Uses | |
| Lands and Realty | Under Alternatives C and D, should unselected BLM lands be designated as SMAs, including WSRs and T&E critical habitat, such lands would be required to remain in federal ownership. IAPs for SMAs may also preclude certain activities and could create a conflict between land users. |
| Leasable, Locatable, and Salable Minerals | The proposed alternatives range from no allowable mineral exploration, development, or production; to the opening of all BLM-lands to mineral leasing. Continued mineral exploration and production will constitute an unavoidable adverse effect on remaining mineral reserves. The effects of mining on the physical, biological, and social environment are discussed under the appropriate resources. |
| Off-Highway Vehicles | Establishment of SMAs with OHV stipulations, and OHV limitations may have perceived adverse effects on OHV use as currently enjoyed. Mining, forestry, and other development activities may also have adverse effects on recreation access and availability and the quality of the recreational experience. |
| Recreation | Establishment of SMAs with recreation stipulations may have unavoidable adverse effects on the recreation patterns within the Ring of Fire planning area. Mining, forestry, and other development activities may also have adverse effects on recreation access and availability and the quality of the recreational experience. |

Table 4.7-1 (continued). Unavoidable Adverse Effects

| Resource | Unavoidable Adverse Effect(s) |
|--|--|
| Social and Economic Environment | |
| Socioeconomics | An increase in renewable and non-renewable resource extraction may beneficially affect the economy, and may stimulate population growth in the Ring of Fire planning area. However, whether an increase in population would have a beneficial or adverse affect on the social settings is uncertain. |
| Subsistence | Mineral development, forestry, and other development activities may have unavoidable adverse effects on subsistence access, harvest availability, and harvest quality. |

This page intentionally left blank.

CHAPTER 5:

CONSULTATION AND COORDINATION



5.0 CONSULTATION AND COORDINATION

5.1 Introduction

This chapter describes the public participation opportunities made available through the development of the Ring of Fire Proposed Resource Management Plan (PRMP)/Final Environmental Impact Statement (FEIS), the formal consultation with federal agencies and federally recognized tribal governments that has occurred to date, and collaborative efforts conducted with the State of Alaska and the Alaska Resource Advisory Council (RAC). It also lists agencies and organizations that will receive copies of the PRMP/FEIS for review, and lists preparers of the document. There have been, and will continue to be, many ways for the public to participate in the planning process for public lands under the jurisdiction of the Anchorage Field Office (AFO).

An interdisciplinary team of specialists from URS Corporation (third-party contractor), the Bureau of Land Management (BLM) Anchorage Field Office (AFO), and the BLM Alaska State Office prepared the Ring of Fire PRMP/FEIS. The State of Alaska has also participated in the development of the document. Both the AFO and State office staff have provided technical review and support.

Members of the PRMP/FEIS team have consulted formally or informally with numerous agencies, groups, and individuals during the PRMP/FEIS development process. Consultation, coordination, and public involvement have occurred through scoping meetings; public review of the Draft RMP/EIS; meetings and briefings with federal, State, and Tribal government representatives; and informational meetings with interested individuals and organizations.

5.2 Public Participation Opportunities

There are several steps throughout the planning process that provide the public with opportunities to participate. Major public participation opportunities are described below.

5.2.1 Scoping

Scoping was initiated with the publication of a Notice of Intent (NOI) in the *Federal Register* (FR) on March 19, 2003. Identification of issues and concerns by agencies and the public was requested during scoping. Prior to the beginning of the scoping process, the BLM identified preliminary management concerns, which were outlined in the first project newsletter. The scoping process further identified management concerns and issues to be addressed through public input. Federal and State agency representatives, tribal representatives, and the general public identified a range of issues and topics to be considered throughout the RMP/EIS process, and specific decisions to be made. These issues were contained in 232 scoping comments received during the scoping process. These comments were evaluated to determine the specific issues or concerns identified by the agencies and the public. The comments were reviewed, organized by issue, and entered into a scoping comments database to facilitate retrieval and tracking through the RMP/EIS process.

All scoping comments and input were collected through the meeting process, as well as via email and United States (U.S.) mail. During the scoping period, representatives of BLM published the first newsletter announcing the beginning of the Ring of Fire RMP/EIS project. A

comment form was included in the newsletter, and electronic copies of both were posted at www.alaskaringoffire.com. The scoping period ended on July 1, 2003.

Seven public meetings were hosted by BLM between April 28 and May 13, 2003, in Juneau, Skagway, Haines, Palmer, Kenai, Kodiak, and Anchorage. An agency meeting was also held on May 14, 2003 in Anchorage. In addition to the public scoping meetings, and at the request of the Chilkat Indian Village in Klukwan, near Haines, an informal meeting with the Ring of Fire planning team was held on April 30, 2003. Locations of other informal scoping meetings included:

- City and Borough of Juneau (CBJ);
- U.S. Forest Service (USFS), Juneau;
- City of Skagway;
- National Park Service (NPS), Klondike Gold Rush National Historic Park, Skagway;
- Haines Borough;
- Kenai Peninsula Borough (KPB) Planning Department;
- Kenai National Wildlife Refuge (NWR);
- Matanuska-Susitna Borough (MSB) Planning Department;
- Kodiak Island Borough (KIB); and
- Municipality of Anchorage (MOA) Planning Department.

5.2.2 Alternative Development

An interdisciplinary team process that included URS and BLM staff specialists, and a representative of the State of Alaska, developed the alternatives. These alternatives were designed to provide a reasonable range of choices for addressing the planning issues identified during scoping. Federal and State agency representatives, tribal representatives, and the general public identified a range of issues and topics to be considered in the RMP/EIS, and alternative development took this process into consideration. Each alternative considered in the PRMP/FEIS allows for some level of support of all resources and resource uses present in the Ring of Fire planning area, and are designed to resolve land management issues identified during the early stages of the planning process, and guide future management.

5.2.3 Draft RMP/EIS Public Involvement

On September 30, 2005, a Notice of Availability (NOA) of the Draft RMP/EIS was published in the Federal Register (Federal Register 2005), marking the beginning of a 90-day public review period for the document. At the same time, print copies and CDs of the Draft RMP/EIS were made available at public libraries throughout the planning area and by request from the BLM AFO, and at public hearings held within the planning area. Copies of the document were also distributed to other federal and State agencies. Public hearings were held between November 15 and December 15, 2005 in Juneau, Skagway, Haines, Palmer, Kenai, Kodiak, and Anchorage. An agency meeting was also held on December 14, 2005 in Anchorage. Informal meetings were held with:

- CBJ;
- City of Skagway;
- Chilkat Indian Village, Klukwan;
- NPS, Klondike Gold Rush National Historic Park, Skagway;
- KPB Planning Department; and
- MSB Planning Department.

The 90-day public review period was originally scheduled to end on December 29, 2005. A comment period extension was requested as a result of a specific mapping error. BLM produced an errata sheet and new maps, and distributed these to the entire project mailing list. The public comment period was extended by 30 days, and officially ended on January 30, 2006. Substantive comments that were received are compiled, with responses, in the Comment Analysis Report (Chapter 6).

5.3 Consultation

5.3.1 U.S. Fish and Wildlife Service Consultation

Consultation with the U.S. Fish and Wildlife Service (USFWS) is required under Section 7 of the Endangered Species Act (ESA) (1973) prior to initiation of any project by BLM that may affect any federally-listed threatened or endangered species or its habitat.

The AFO initiated the Section 7 consultation with USFWS via a letter, which described the proposed project, including a detailed description of the alternatives. During the consultation, a species list was requested by BLM. As part of the PRMP/FEIS, a Biological Assessment is being prepared.

5.3.2 National Marine Fisheries Service Consultation

The National Marine Fisheries Service (NMFS) is responsible for the administration of the ESA as it applies to listed cetaceans and pinnipeds in Alaska. These include seven species of endangered whales, the threatened eastern population of Steller sea lions, and the endangered western population of Steller sea lions.

An informal consultation with NMFS was initiated by the AFO via a letter that described the planning project area, the project alternatives, and a requested species list. A written response from NMFS provided a list of the threatened and endangered species found throughout the planning area, and indicated that the endangered and threatened stocks of Steller sea lions and the humpback whale would most likely occur in the waters adjacent to the Ring of Fire planning area (Payne 2003). As part of the PRMP/FEIS, an assessment of Essential Fish Habitat (EFH) is being prepared.

5.3.3 Tribal Consultation

In accordance with the National Historic Preservation Act (NHPA) (1966), as well as in recognition of the government-to-government relationship between Native villages and corporations and the federal government (Executive Order 13175), letters inviting cooperation were sent to over 150 Native villages and corporations. Only the Chilkat Indian Village in

Klukwan, near Haines, and the Eklutna Native Village, located in Chugiak, north of Anchorage, responded to BLM's invitation.

At their request, an informal meeting was held with the Chilkat Indian Village to discuss issues and concerns for management of BLM lands in the area. BLM met with representatives of the Chilkat Indian Village on two separate occasions during the development of the Draft RMP/EIS. Government-to-government coordination facilitated communication with the villages throughout the planning process and opened the door to increased coordination and consultation after the plan is completed.

5.4 Collaborative Efforts

5.4.1 Cooperation with the State of Alaska

Because of the high percentage of State-selected lands within the Ring of Fire planning area, BLM has involved the State of Alaska from the beginning of this planning process. Early on, a letter was sent inviting the State of Alaska to participate in the RMP/EIS process. A joint BLM-State position was created, with that person acting as liaison between the State of Alaska and BLM during this planning process. This has been effective in facilitating information exchanges and reviews of draft materials by State personnel.

Constant involvement throughout the planning process has taken place with the State of Alaska, and several meetings were held between the State and BLM at varying levels of authority to discuss the development of the Ring of Fire PRMP/FEIS. These meetings were productive in developing an understanding between the State and BLM regarding management of State-selected lands.

5.5 Plan Distribution

Since initial scoping, BLM has maintained a mailing list of individuals, businesses, special interest groups, and federal, State, Tribal, and local government representatives interested in the development of the Ring of Fire RMP/EIS (currently at 459 individuals/groups). All interested parties who requested a copy (hard copy or CD) of the Draft RMP/EIS received a copy of the PRMP/FEIS as well. In addition, notices were mailed to everyone on the RMP/EIS mailing list in June 2006 asking in which format (hard copy or CD) they wished to receive the document for review. Those who responded received the document in the form that they requested. Copies of the Ring of Fire PRMP/FEIS are available for public inspection at the following locations:

- A. Holmes Johnson Memorial Library (Kodiak).
- Alaska Resources Library (Anchorage).
- Alaska State Library (Juneau).
- Anchorage Municipal Library (Z.J. Loussac Library).
- Bartlett School Library (Tyonek).
- BLM AFO.
- BLM Alaska State Office, Public Information Center (formerly the Public Room), Anchorage.
- Chugach National Forest (CNF) Office, Cordova.

- Chugiak-Eagle River Library.
- Department of Interior Natural Resources Library (Washington, DC).
- Egegik Public Library.
- Haines Borough Public Library.
- Homer Public Library.
- Irene Ingle Public Library (Wrangell).
- Kenai Community Library.
- Ketchikan Public Library.
- Kettleson Memorial Library (Sitka).
- Matanuska-Susitna Borough Offices.
- Meshik School Library (Port Heiden).
- Palmer Public Library.
- Seward Community Library.
- Skagway Public Library.
- Talkeetna Public Library.
- Valdez Consortium Library.
- Wasilla Public Library.

Concurrent with the distribution of the PRMP/FEIS, a Notice of Availability was published by the U.S. Environmental Protection Agency (USEPA) in the FR to mark the beginning of the 30-day protest period. BLM also published a Notice of Availability in the FR announcing the availability of the PRMP/FEIS and the start of the protest period.

Hard copies, or CDs when requested, of the Draft and PRMP/FEIS have been distributed to the following organizations, agencies, and individuals who have requested them, or as required by regulation or policy.

Federal Government Agencies

- Alaska Peninsula/Becharof NWR
- Army Corps of Engineers, Pacific Ocean Division
- Bureau of Indian Affairs
- BLM – Director’s Office
- Bureau of Reclamation – Office of Program and Policy Services
- Katmai National Park & Preserve
- Kodiak NWR
- Minerals Management Service – Environmental Division
- NMFS, Protected Resource Management Division
- NPS – Division of Environmental Quality

- Office of Energy – National Environmental Policy Act (NEPA) Policy and Compliance
- Office of Surface Mining – Planning, Analysis, and Budget
- U.S. Air Force
- U.S. Coast Guard
- U.S. Department of the Interior – Office of Environmental Policy and Compliance
- U.S. Department of the Interior – Office of External Affairs
- U.S. EPA – Alaska State Director
- U.S. EPA – Office of Federal Activities, EIS Filing Section
- U.S. EPA – Region 10
- U.S. FWS – Division of Environmental Quality
- U.S. Geological Survey (USGS) – Environmental Affairs Program
- U.S. Department of Agriculture (USDA) Forest Service – CNF
- USDA Forest Service – Ecosystem Management Coordination
- USDA Forest Service – Tongass National Forest

State Government Agencies and Organizations

- Alaska Department of Natural Resources (ADNR)
- Alaska State Historic Preservation Officer
- Honorable Frank Murkowski, Governor of Alaska
- University of Alaska, Anchorage – Land Management

Local Governments and Committees

- City of Delta Junction
- City of Kodiak
- City of Skagway
- KPB
- Kodiak Island Borough
- Lake and Peninsula Borough (LPB)
- MSB

Tribal Governments and Committees

- Afognak Native Corporation
- Calista Corporation
- Chignik Lagoon Native Corporation
- Chignik Lagoon Village Council
- Cook Inlet Region, Inc.

- Egegik Village
- Native Village of Pauloff Harbor
- Native Village of Port Lyons
- Ninilchik Native Association
- Sealaska Corporation
- Tyonek Native Corporation
- Unga Corporation

Congressionals

- U.S. Representative Don Young
- U.S. Senator Lisa Murkowski
- U.S. Senator Ted Stevens

State Legislators

- Rep. Tom Anderson
- Rep. Ethan Berkowitz
- Sen. Con Bunde
- Rep. Mike Chenault
- Rep. Sharon Cissna
- Sen. John Cowdery
- Rep. Harry Crawford
- Rep. Eric Croft
- Rep. Nancy Dahlstrom
- Sen. Bettye Davis
- Sen. Fred Dyson
- Rep. Jim Elkins
- Sen. Johnny Ellis
- Sen. Kim Elton
- Sen. Hollis French
- Rep. Les Gara
- Rep. Berta Gardner
- Rep. Carl Gatto
- Sen. Lyda Green
- Rep. Max Gruenberg
- Sen. Gretchen Guess
- Rep. Mike Hawker

- Sen. Lyman Hoffman
- Sen. Charlie Huggins
- Rep. Beth Kerttula
- Rep. Vic Kohring
- Sen. Al Kookesh
- Rep. Pete Kott
- Rep. Gabrielle LeDoux
- Rep. Bob Lynn
- Rep. Lesil McGuire
- Rep. Kevin Meyer
- Rep. Carl Moses
- Rep. Mark Neuman
- Rep. Kurt Olson
- Rep. Norman Rokeberg
- Rep. Ralph Samuels
- Rep. Paul Seaton
- Sen. Bert Stedman
- Sen. Ben Stevens
- Sen. Gary Stevens
- Rep. Bill Stoltze
- Rep. William Thomas, Jr.
- Sen. Thomas Wagoner
- Rep. Bruce Weyhrauch
- Rep. Peggy Wilson

Non-Governmental Organization and Businesses

- Alaska Boating Association
- Alaska Coalition
- Alaska Welcomes You
- Anchorage Audubon Society
- Arctic Bicycle Club
- Chugach Alaska Corporation
- Lynn Canal Conservation Association
- Sheinberg & Associates
- The Wilderness Society
- Usibelli Coal Mine, Inc.

5.6 Interdisciplinary Team

The PRMP/FEIS was prepared by an interdisciplinary team of specialists, as listed in Table 5.6-1 and included expertise from across the state.

Table 5.6-1. List of Preparers

| Name | Responsibility | Education | Years of Experience |
|---|--|---|---------------------|
| URS Corporation | | | |
| Jon Isaacs | Project Manager, Lands and Realty | B.A. Environmental Studies, University of California, Santa Barbara | 31 years |
| Amy Lewis | Deputy Project Manager, Recreation, Visual, Off-Highway Vehicles | M.S. Environmental Science, Alaska Pacific University | 10 years |
| Luke Boggess | GIS | A.A. General Studies, Certified GIS Specialist | 7 years |
| Angela Brennan | Water Resources | M.S. Environmental Science, Western Washington University | 7 years |
| Karen Brown | Floodplains, Farmlands | B.S. Environmental Science, University of South Florida, Tampa | 7 years |
| Kim Busse | Fisheries and Aquatic Habitat | B.S. Biology, Loyola Marymount University | 7 years |
| Kelly Clark | Lands and Realty, Forestry, Grazing, Hazardous Materials, Renewable Energy | B.S. Environmental Science, Colorado College | 3 years |
| Nancy Darigo | Physiography, Geology, Leasables, Locatables, and Salables | M.S. Geology, University of Southern California, Los Angeles | 22 years |
| James Dietzmann | Soils | B.S. Watershed Science, Colorado State University, Fort Collins | 14 years |
| David Erikson | Wildlife, Threatened and Endangered Species | M.S. Biology, University of Nevada, Reno | 21 years |
| Jim Glaspell | Wildlife, Water Resources, Floodplains | M.S. Wildlife Management, Penn State University | 24 years |
| Michelle Harper | Paleontology | B.S. Natural Science, University of Alaska Anchorage | 8 years |
| Eric Klein | Air Resources, Climate, Soils, GIS | M.S. Environmental Science, Alaska Pacific University | 4 years |
| Richard Kleinleder | Wildlife, Threatened and Endangered Species | M.S. Biology, University of Alaska Fairbanks | 21 years |
| Joan Kluwe | Socioeconomics, Recreation, Wild and Scenic Rivers | Ph.D. Natural Resources, University of Idaho | 15 years |
| Colleen Lavery | Lands and Realty, Special Management Areas | B.S. Forestry and Natural Resources Management | 4 years |
| Kristin Marsh | Vegetation, Wetlands-Riparian, Invasive Plants | B.A. Environmental Science, Alaska Pacific University | 5 years |
| Jill Missal | Wildland Fire and Fuels | M.S. Emergency Management, Oklahoma State University | 1 year |
| Anne Southam | Water Resources | M.S. Environmental Science, University of North Texas, Denton | 6 years |
| Stephen R. Braund and Associates | | | |
| Stephen Braund | Subsistence, Cultural Resources | M.A. Anthropology, Subsistence, and Cultural Resources | 31 years |
| Elizabeth Grover | Subsistence, Cultural Resources | M.A. Anthropology, Subsistence, and Cultural Resources | 11 years |
| Erik Hilsinger | Subsistence, Cultural Resources | M.A. Anthropology, Subsistence, and Cultural Resources | 16 years |
| Iris Prophet | GIS | B.S. expected 2005 | 3 years |

Table 5.6-1 (continued). List of Preparers

| Name | Responsibility | Education | Years of Experience |
|---|--|---|----------------------------|
| Bureau of Land Management Anchorage Field Office | | | |
| Robert Lloyd | Project Manager | B.A. English Literature, Alaska Methodist University | 28 years |
| Gary Reimer | Field Office Manager | B.A. Political Science, California State – Los Angeles | 32 years |
| Doug Ballou | VRM | B.A. Geography, University of New Mexico | 26 years |
| Larry Beck | Hazardous Materials | B.B.Ad. Gonzaga University, Certified Hazardous Materials Manager, IHMM | 15 years |
| Michael Bennett | Realty Group Manager, Acting | B.S. Natural Resource Management | 27 years |
| Charles Denton | Air, Water, Soil, Wetlands | M.S. Hydrology, University of Nevada | 9 years |
| Jeff Denton | Subsistence, Wildlife, T&E Species | M.S. Wildlife Biology/Management, University of Montana | 36 years |
| Ralph Falsetto | GIS | B.A. Geology, Western State College | 9 years |
| Rodney Huffman | Lands and Realty | B.A. History, Humboldt State University | 11 years |
| David Kelley | Locatable Minerals, Vegetation | | |
| Jeff Kowalczyk | OHV, VRM, WSR, Recreation | B.S. Natural Resource Management, California Polytechnical University | 15 years |
| Mary Lynch | Fire and Fuels, AFS | B.A. Psychology, State University of New York | 27 years |
| Teresa McPherson | Public Affairs | Journalism and Public Communications, University of Alaska, Anchorage | 18 years |
| Paxton McClurg | GIS | | |
| Carl Persson | Locatable and Salable Minerals | | |
| Donna Redding | Cultural and Paleontological Resources | Ph.D. Anthropology, UCLA | 33 years |
| Jake Schlapfer | OHV, VRM, WSR, Recreation | M.S. Multi-resource Management, Northern Arizona University | 17 years |
| Mike Scott | Fisheries | M.S. Fisheries Management, Tennessee Tech | 31 years |
| Bruce Seppi | Wildlife, T&E Species | M.S. Wildlife Management | 16 years |
| Brian Sterbenz | Fire and Fuels | B.S. Forest Management, Iowa State University | 18 years |
| Mike Zaidlicz | Resources Group Manager | B.S. Forestry, University of Montana | 31 years |
| Bureau of Land Management Alaska State Office | | | |
| Taylor Brelsford | ANILCA Section 810 Analysis | M.A. Anthropology, McGill University | 25 years |
| Robert Brumbaugh | Fluid and Solid Leasable Minerals | B.A. Earth Science, University of Alaska, Fairbanks | 10 years |
| Bill Diel | Fluid and Solid Leasable Minerals | B.S. Geology, Arizona State University | 24 years |
| Jim Ducker | NEPA Specialist | Ph.D. History, University of Illinois | 18 years |
| Mark Meyer | Locatable and Salable Minerals | B.S. Geology, University of Wisconsin – Oshkosh | 28 years |

Table 5.6-2. List of Reviewers

| Name | Title |
|--|----------------------------------|
| Bureau of Land Management Alaska State Office | |
| Andi Bauer | Writer/Editor |
| Harrison Griffin | Physical Scientist |
| Bruce Hollen | Special Status Species Biologist |
| Mike Kasterin | Regional Economist |
| Robert King | Archaeologist |
| Lee Koss | Hydrologist |
| Susan Lavin | Realty Specialist |
| Bill Overbaugh | Outdoor Recreation Planner |
| John Payne | Wildlife Biologist |
| Larry Standley | Hydrologist |
| Dennis Tol | Fisheries Biologist |
| Curtis Wilson | Supervisory Land Use Planner |
| Alaska Department of Natural Resources Representative | |
| Carol Fries | Natural Resources Manager |

This page intentionally left blank.

CHAPTER 6:

COMMENT ANALYSIS REPORT



6.0 COMMENT ANALYSIS REPORT

6.1 INTRODUCTION

On September 30, 2005, a Notice of Availability of the Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the Bureau of Land Management (BLM) Ring of Fire planning area was published in the Federal Register (Federal Register 2005), marking the beginning of a 90-day public review period for the document. At the same time, print copies and CDs of the Draft RMP/EIS were made available at public libraries throughout the planning area and by request from the BLM Anchorage Field Office (AFO), and at public hearings held within the planning area. Copies of the document were also distributed to other interested federal and State agencies.

The 90-day public review period was originally scheduled to end on December 29, 2005. A comment period extension was requested as a result of a specific mapping error. BLM produced an errata sheet and new maps, and distributed these to the entire project mailing list. The public comment period was extended by 30 days, and officially ended on January 30, 2006.

In accordance with the National Environmental Policy Act (NEPA), public testimony was recorded at the seven public hearings held in Juneau (Nov. 15, 2005), Skagway (Nov. 16, 2005), Haines (Nov. 17, 2005), Palmer (Dec. 8, 2005), Kodiak (Dec. 12, 2005), Anchorage (Dec. 14, 2005), and Kenai (Dec. 15, 2005). Comments were accepted at any point during the 120-day period and could be submitted via email, United States (U.S.) mail, in person, fax, or through oral testimony at the public hearings. All comments received or post-marked by January 30, 2006 are included in this Comment Analysis Report (CAR).

Section 810 of Alaska National Interest Land Conservation Act (ANILCA) requires an evaluation and findings on whether the proposed Federal land use decisions "may significantly restrict" subsistence uses. If the proposed action may significantly restrict subsistence uses, then notice and special purpose public hearings, referred to as Section 810 hearings or Subsistence Impact hearings, are required. The analysis of potential effects to subsistence uses (Appendix I) concluded that the proposed activities would not significantly restrict subsistence uses. As a result, the Section 810 provisions concerning notice and hearings did not apply, and no separate hearings on subsistence impacts were held. The public was able to review and comment on the information and analysis in the Section 810 Analysis provided in the Draft RMP/EIS (Appendix I) and a number of comments were received. In response to these comments, the language in the Section 810 Analysis for the Proposed RMP/Final EIS was revised to more fully articulate the information base on which analytic conclusions were drawn.

The CAR summarizes the submissions and testimony received during the public review of the Draft RMP/EIS. Most of the testimony and written submittals contained multiple comments about the Draft RMP/EIS. These comments were identified and, where possible, grouped into issue categories (e.g., hazardous materials, fish, visual resources).

Each comment has been assigned a unique identifier so that comments can be referenced back to the originator. Section 6.2 describes the process and methodology used to track and code comments received during the public review period. A brief overview of the number of comments and the general types of comments received on the Draft RMP/EIS is provided in Section 6.3. Attachment A, located at the end of the report, provides an alphabetical list of commenters and their corresponding issue categories that can be used to locate specific comment responses. Attachment D provides an ordered listing of submission numbers and the corresponding commenter, which can also be used to help locate comment responses.

6.2 COMMENT ANALYSIS PROCESS

The analysis of public comments on the Draft RMP/EIS was a multi-stage process that included coding, sorting, and responding to public comment submissions. The process is described in detail below.

6.2.1 Issue Categories

The coded comments in each issue category were reviewed to identify similarities among comments. All similar comments in an issue category were grouped together, assigned an issue code, and a single response that captured the meaning of those comments was prepared. Similar statements were referred back to one comment response where possible. Finally, a global review of the responses was completed to minimize duplication.

6.2.2 Coding

All submissions were assigned a unique identifying number (see Attachment D, Submission Index), and categorized by submission type (email, print copy, or testimony). Each submission was then reviewed to identify all substantive comments within it. Non-substantive and substantive comments are defined in the BLM's Land Use Planning Handbook:

“Non-substantive comments are those that include opinions, assertions, and unsubstantiated claims. Substantive comments are those that reveal new information, missing information, or flawed analysis that would substantially change conclusions” (BLM 2005b: 23-24).

The BLM's National Environmental Policy Act (NEPA) Handbook further clarifies that “comments which express personal preferences or opinions on the proposal do not require a response. They are summarized whenever possible and brought to the attention of the manager responsible for preparing the EIS. Although personal preferences and opinions may influence the final selection of the agency's preferred action, they generally will not affect the analysis” (BLM 1988b: V-12). The planning team also adhered to the Council on Environmental Quality's regulations implementing NEPA at 40 Code of Federal Regulations (CFR) 1503.4 (a) to determine which comments would be included with responses in Attachments B and C of this chapter.

Once identified, each comment was assigned a unique identification number, which was made up of the submission identification and comment number to ensure that each

comment could be readily referenced back to the originator. As seen in the Name Index (Attachment A), each submission can have more than one comment associated with it. Comments were assigned to an issue category (Table 6-1) that reflected the substance of the comment. After all of the submissions were coded, the comment code numbers were transferred into a database along with the name of the commenter, date received, type of submission (i.e. public hearing, email) and any contact information. This allowed comment sorting by various means. Some non-substantive comments were brought to the attention of the BLM during the coding process. These have been included in Attachments B and C, but are responded to as “comment acknowledged.” The substantive comments, and the responses to them, comprise the bulk of this chapter, and can be found in Attachments B and C of this chapter. Comments are included *verbatim*, either as they were submitted in letters or email, or as they were recorded at public hearings.

Many of the comments expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft RMP/EIS, or represented commentary regarding resource management without any direct connection to the document being reviewed. These comments did not provide specific information to assist in making a change to the proposed action, did not suggest other alternatives, or did not take issue with methods used in the Draft RMP/EIS. They were given in issue code of “ACK” (comment acknowledged), and are not addressed further in this document. Example of non-substantive comments include:

- “I support the SRMA designation for the Haines Block,” and
- “I do not agree with the ‘limited’ OHV designation for all BLM-managed lands.”

Form Letters

There were two different form letters received via email during the comment period. Form letters were analyzed in the same manner as all other comments. Each form letter was analyzed for substantive comments, coded, and entered into the database, and the number of signatures on each form letter, or the instances of each form letter received was recorded. For example, if we received a form letter from 4,000 individuals, the number of submissions was recorded as 4,000 but the comments within the form letter itself are coded once and any substantive comments noted in this appendix. Only one response was prepared for each substantive comment.

In Attachment A, Name Index, if a person submitted a form letter, they will see either “Form Letter #1” or “Form Letter #2” next to their name. To see how the substantive form letter comments were responded to, the person would then go to Attachment B, Form Letter Response Index.

6.3 Public Comment Overview

The public process resulted in 783 submissions received on the Draft RMP/EIS. These 783 submissions were received in the following formats: 732 emails, of which 534 were from Form Letter #1, and 145 were from Form Letter #2; 30 letters; 16 from public hearing testimony; and five from the comment form.

Table 6-1: Issue Codes

| Issue Code | Issue |
|-------------------|-----------------------------------|
| ACC | Access/Travel Management |
| ACK | Comment Acknowledged |
| AKN | Alaska Natives |
| ALT | Alternatives |
| CEF | Cumulative Effects |
| CLI | Climate Change |
| COR | Coordination and Compatibility |
| CUL | Cultural Resources |
| DOI | DOI/BLM Compliance |
| EDI | Edits Requested |
| EFM | Enforcement and Monitoring |
| ENJ | Environmental Justice |
| FIR | Fire and Fuel Management |
| FSH | Fish |
| HAZ | Hazardous Materials |
| LAR | Lands and Realty |
| LEA | Leasable Minerals |
| LOC | Locatable and Salable Minerals |
| MAP | Mapping |
| NAT | Natural Resources |
| NEP | NEPA Compliance |
| OHV | Off-Highway Vehicles |
| PAL | Paleontological |
| REC | Recreation |
| REN | Renewable Energy |
| ROP | ROPs and Stipulations |
| SMA | Special Management Areas |
| SOC | Socioeconomics |
| SOI | Soils |
| SUB | Subsistence |
| TNE | Threatened and Endangered Species |
| VEG | Vegetation |
| VIS | Visual Resources |
| WAT | Water Resources |
| WET | Wetlands |
| WIL | Wildlife |
| WLD | Wilderness |
| WSR | Wild and Scenic Rivers |

The three cities that produced the greatest number of submissions were the Alaskan cities of Haines, Anchorage, and Palmer with 22, 15, and 12, respectively (Figure 6-1). However, the state that produced the greatest number of submissions was California with 108 (Figure 6-2). Upon analysis, as described previously, these 783 submissions produced 922 unique comments.

6.4 ISSUE CATEGORIES

Every substantive comment was assigned to an issue category, which helped group similar comment responses (Table 6-1). Figure 6-3 groups comments by issue, such as Special Management Areas, Visual Resources, and Wildlife. This figure reflects the number of times comments regarding these topics were raised in the submissions.

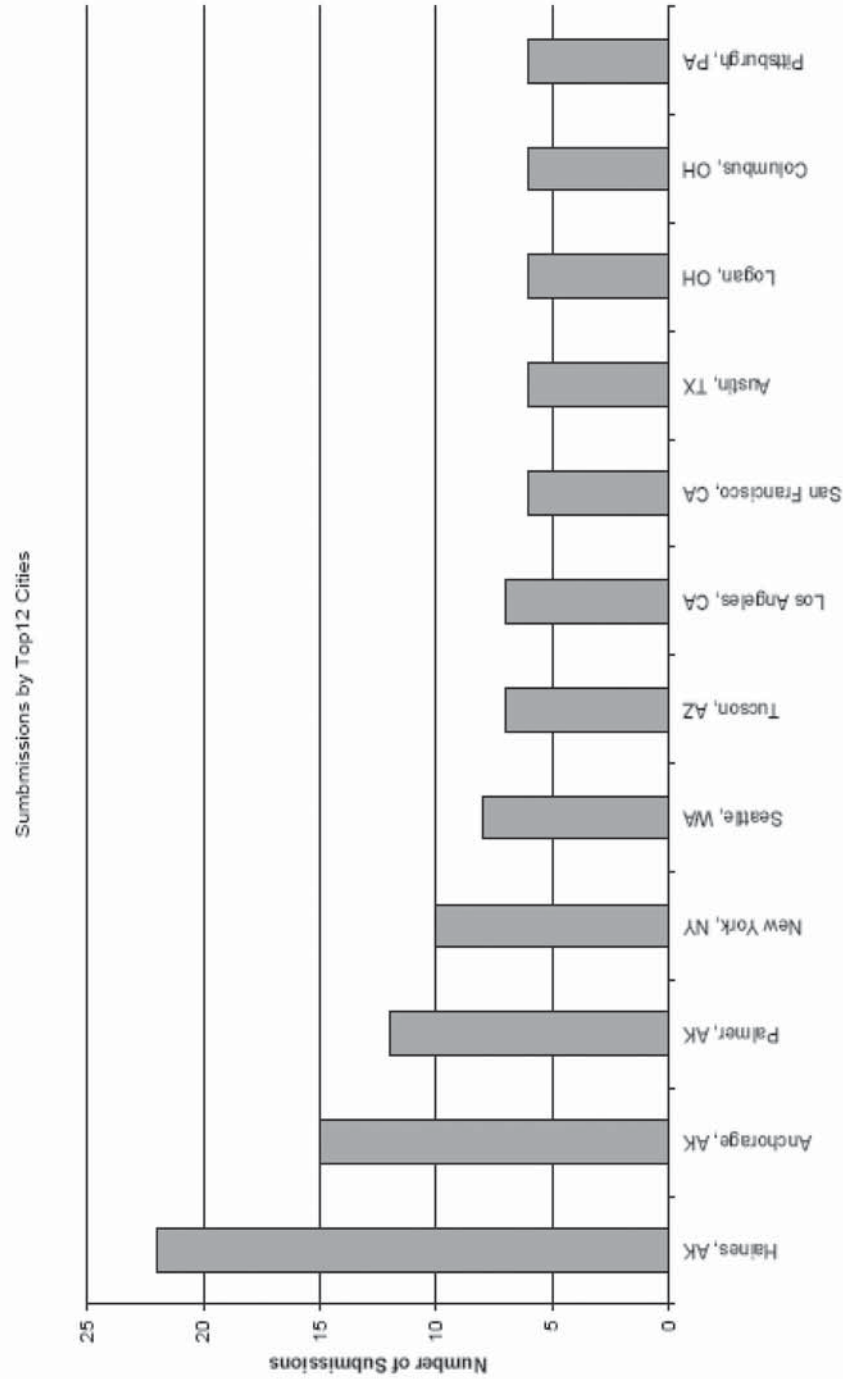


Figure 6-1: Distribution of Submissions by City

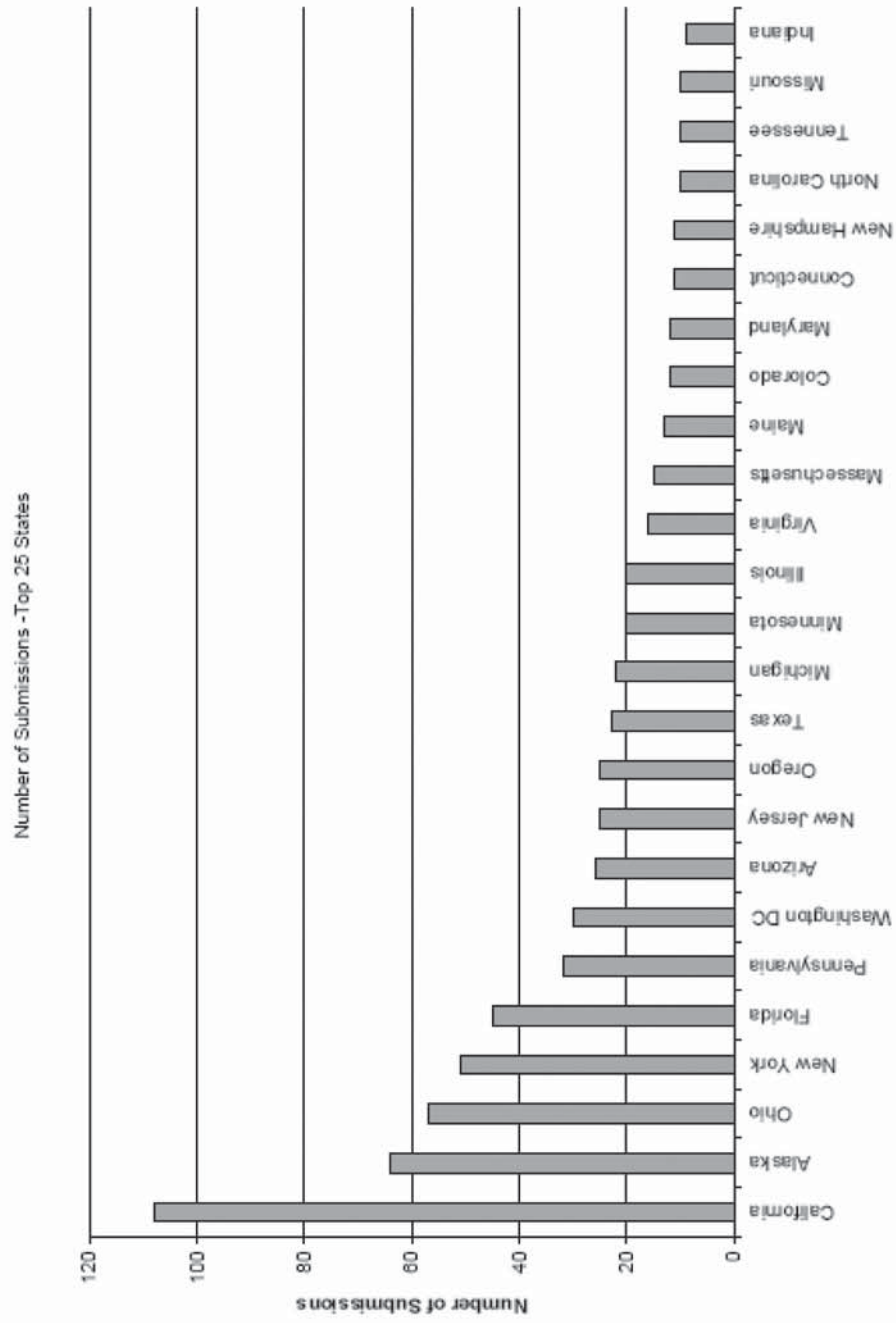


Figure 6-2: Distribution of Submissions by State

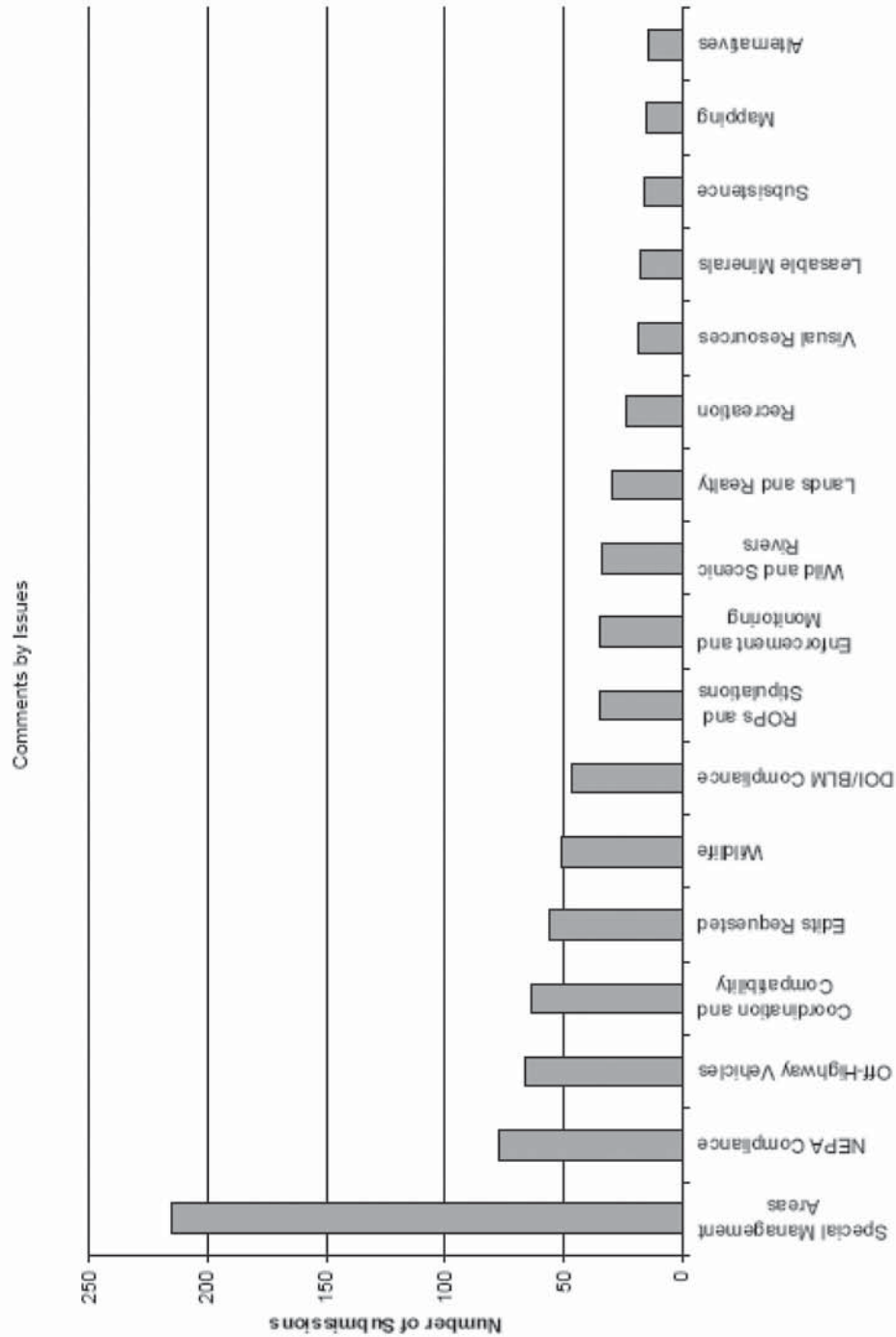


Figure 6-3: Comments Received Grouped by Issue Category

ATTACHMENT A

NAME INDEX

A**Abshire, Kristine A.**

Alaskans for Palmer Hay Flats SGR

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 28 - 1 | SMA | 19 Jan, 2006 |
| 28 - 2 | LEA | 19 Jan, 2006 |
| 28 - 3 | WIL | 19 Jan, 2006 |
| 28 - 4 | LEA | 19 Jan, 2006 |
| 28 - 5 | SMA | 19 Jan, 2006 |
| 28 - 6 | ACK | 19 Jan, 2006 |
| 28 - 7 | LAR | 19 Jan, 2006 |
| 28 - 8 | NEP | 19 Jan, 2006 |
| 28 - 9 | ACK | 19 Jan, 2006 |
| 28 - 10 | SMA | 19 Jan, 2006 |
| 28 - 11 | ACK | 19 Jan, 2006 |
| 28 - 12 | COR | 19 Jan, 2006 |
| 28 - 13 | ACK | 19 Jan, 2006 |
| 28 - 14 | ACK | 19 Jan, 2006 |
| 28 - 15 | LEA | 19 Jan, 2006 |
| 28 - 16 | LEA | 19 Jan, 2006 |
| 28 - 17 | REC | 19 Jan, 2006 |
| 28 - 18 | SMA | 19 Jan, 2006 |

Acevedo, N. K.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Adams, Kathleen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Adelman, Charlotte

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |

Alderson, George

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 19 - 1 | ACK | 07 Dec, 2005 |
| 19 - 2 | SMA | 07 Dec, 2005 |
| 19 - 3 | ACK | 07 Dec, 2005 |
| 19 - 4 | OHV | 07 Dec, 2005 |
| 19 - 5 | OHV | 07 Dec, 2005 |
| 19 - 6 | SMA | 07 Dec, 2005 |
| 19 - 7 | SMA | 07 Dec, 2005 |
| 19 - 8 | NEP | 07 Dec, 2005 |

Allred, Frances

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Amato, Gwendoline

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |

Amato, Gwendoline

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 12 Jan, 2006 |

Anderson, Corina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Anixter, Shelley

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Arnesen, Jim

Eklutna, Inc.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 48 - 1 | NEP | 22 Dec, 2005 |
| 48 - 2 | ACK | 22 Dec, 2005 |
| 48 - 3 | ACK | 22 Dec, 2005 |

Ashton, Ann

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |

Ashton, Ann

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

B**Babiak, Katherine**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Babst, Christina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Bafik-vehslage, Michelle

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |

Bafik-vehslage, Michelle

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Bail, Joseph

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Baker McCain, Melanie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Bandy, Paula

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Banks, David

The Nature Conservancy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 36 - 1 | ACK | 30 Jan, 2006 |
| 36 - 2 | ACK | 30 Jan, 2006 |
| 36 - 3 | SMA | 30 Jan, 2006 |
| 36 - 4 | COR | 30 Jan, 2006 |
| 36 - 5 | LAR | 30 Jan, 2006 |

Banks, David

The Nature Conservancy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 36 - 6 | ACK | 30 Jan, 2006 |

Barber, Kenny

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 25 - 1 | ACK | 21 Dec, 2005 |
| 25 - 2 | ACK | 21 Dec, 2005 |
| 25 - 3 | COR | 21 Dec, 2005 |
| 25 - 4 | COR | 21 Dec, 2005 |
| 25 - 5 | OHV | 21 Dec, 2005 |
| 25 - 6 | REC | 21 Dec, 2005 |
| 25 - 7 | LAR | 21 Dec, 2005 |

Barkla, Paul

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Baron, Stewart

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Barton, Roberta

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Bashen, Melinda

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Bauer, Kim

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Baureis, Regina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Beam, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 18 Jan, 2006 |
| F2 - 2 | SMA | 18 Jan, 2006 |
| F2 - 3 | SMA | 18 Jan, 2006 |
| F2 - 4 | VIS | 18 Jan, 2006 |
| F2 - 5 | NEP | 18 Jan, 2006 |

Bebber-wells, Rebecca

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 16 Dec, 2005 |
| F1 - 2 | SMA | 16 Dec, 2005 |

Bebber-wells, Rebecca

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 16 Dec, 2005 |
| F1 - 4 | SMA | 16 Dec, 2005 |
| F1 - 5 | ACK | 16 Dec, 2005 |

Becker, Marilyn

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Bell, Ray

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 25 Jan, 2006 |
| F2 - 2 | SMA | 25 Jan, 2006 |
| F2 - 3 | SMA | 25 Jan, 2006 |
| F2 - 4 | VIS | 25 Jan, 2006 |
| F2 - 5 | NEP | 25 Jan, 2006 |
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Bellemare, Renee'

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |

Bellemare, Renee'

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 14 Dec, 2005 |

Benenati, Scott

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Benge, Regina K.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Berg, Samuel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Berglas, Silvia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 17 Jan, 2006 |

Berglas, Silvia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 2 | SMA | 17 Jan, 2006 |
| F2 - 3 | SMA | 17 Jan, 2006 |
| F2 - 4 | VIS | 17 Jan, 2006 |
| F2 - 5 | NEP | 17 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Berland, Nancy

Lynn Canal Conservation, Inc.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 34 - 1 | NEP | 29 Dec, 2005 |
| 34 - 2 | ACK | 29 Dec, 2005 |
| 34 - 3 | SMA | 29 Dec, 2005 |
| 34 - 4 | ALT | 29 Dec, 2005 |
| 34 - 5 | SMA | 29 Dec, 2005 |
| 34 - 6 | NEP | 29 Dec, 2005 |
| 34 - 7 | NEP | 29 Dec, 2005 |
| 34 - 8 | ACK | 29 Dec, 2005 |
| 34 - 9 | ACK | 29 Dec, 2005 |
| 34 - 10 | DOI | 29 Dec, 2005 |
| 34 - 11 | DOI | 29 Dec, 2005 |
| 34 - 12 | DOI | 29 Dec, 2005 |
| 34 - 13 | WIL | 29 Dec, 2005 |
| 34 - 14 | SMA | 29 Dec, 2005 |
| 34 - 15 | REC | 29 Dec, 2005 |
| 34 - 16 | SMA | 29 Dec, 2005 |
| 34 - 17 | ACK | 29 Dec, 2005 |
| 34 - 18 | SMA | 29 Dec, 2005 |
| 34 - 19 | ALT | 29 Dec, 2005 |
| 34 - 20 | SMA | 29 Dec, 2005 |
| 34 - 21 | ACK | 29 Dec, 2005 |
| 34 - 22 | SMA | 29 Dec, 2005 |
| 34 - 23 | SMA | 29 Dec, 2005 |
| 34 - 24 | SMA | 29 Dec, 2005 |
| 34 - 25 | SMA | 29 Dec, 2005 |
| 34 - 26 | SMA | 29 Dec, 2005 |
| 34 - 27 | DOI | 29 Dec, 2005 |
| 34 - 28 | SMA | 29 Dec, 2005 |
| 34 - 29 | SMA | 29 Dec, 2005 |
| 34 - 30 | ALT | 29 Dec, 2005 |
| 34 - 31 | ROP | 29 Dec, 2005 |
| 34 - 32 | ROP | 29 Dec, 2005 |
| 34 - 33 | ROP | 29 Dec, 2005 |

Berland, Nancy

Lynn Canal Conservation, Inc.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 34 - 34 | WIL | 29 Dec, 2005 |
| 34 - 35 | REC | 29 Dec, 2005 |
| 34 - 36 | NEP | 29 Dec, 2005 |

Berman, Nancy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |

Bettmann, Joanna

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Bingham, Carl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 9 - 1 | ACK | 08 Dec, 2005 |
| 9 - 2 | OHV | 08 Dec, 2005 |

Bixler, Simona

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |

Bixler, Simona

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Blair, Melissa

Alaska Coalition

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 13 - 1 | ACK | 14 Dec, 2005 |
| 13 - 2 | SMA | 14 Dec, 2005 |
| 13 - 3 | SMA | 14 Dec, 2005 |
| 13 - 4 | VIS | 14 Dec, 2005 |
| 13 - 5 | ACK | 14 Dec, 2005 |
| 13 - 6 | WSR | 14 Dec, 2005 |
| 13 - 7 | TNE | 14 Dec, 2005 |
| 119 - 1 | ACK | 30 Jan, 2006 |
| 119 - 2 | NEP | 30 Jan, 2006 |
| 119 - 3 | ALT | 30 Jan, 2006 |
| 119 - 4 | ACK | 30 Jan, 2006 |
| 119 - 5 | DOI | 30 Jan, 2006 |
| 119 - 6 | ACK | 30 Jan, 2006 |
| 119 - 7 | ACK | 30 Jan, 2006 |
| 119 - 8 | ACK | 30 Jan, 2006 |
| 119 - 9 | REC | 30 Jan, 2006 |
| 119 - 10 | SMA | 30 Jan, 2006 |
| 119 - 11 | AKN | 30 Jan, 2006 |
| 119 - 12 | LAR | 30 Jan, 2006 |
| 119 - 13 | SMA | 30 Jan, 2006 |
| 119 - 14 | SMA | 30 Jan, 2006 |
| 119 - 15 | NEP | 30 Jan, 2006 |
| 119 - 16 | SMA | 30 Jan, 2006 |
| 119 - 17 | ACK | 30 Jan, 2006 |
| 119 - 18 | WSR | 30 Jan, 2006 |
| 119 - 19 | SMA | 30 Jan, 2006 |
| 119 - 20 | SMA | 30 Jan, 2006 |
| 119 - 21 | SMA | 30 Jan, 2006 |
| 119 - 22 | LAR | 30 Jan, 2006 |
| 119 - 23 | COR | 30 Jan, 2006 |
| 119 - 24 | DOI | 30 Jan, 2006 |
| 119 - 25 | WSR | 30 Jan, 2006 |
| 119 - 26 | WSR | 30 Jan, 2006 |
| 119 - 27 | WSR | 30 Jan, 2006 |

Blair, Melissa

| Alaska Coalition | | |
|------------------|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 119 - 28 | DOI | 30 Jan, 2006 |
| 119 - 29 | WSR | 30 Jan, 2006 |
| 119 - 30 | DOI | 30 Jan, 2006 |
| 119 - 31 | WSR | 30 Jan, 2006 |
| 119 - 32 | WSR | 30 Jan, 2006 |
| 119 - 33 | CEF | 30 Jan, 2006 |
| 119 - 34 | WSR | 30 Jan, 2006 |
| 119 - 35 | WSR | 30 Jan, 2006 |
| 119 - 36 | SMA | 30 Jan, 2006 |
| 119 - 37 | OHV | 30 Jan, 2006 |
| 119 - 38 | SMA | 30 Jan, 2006 |
| 119 - 39 | OHV | 30 Jan, 2006 |
| 119 - 40 | ACK | 30 Jan, 2006 |
| 119 - 41 | OHV | 30 Jan, 2006 |
| 119 - 42 | LAR | 30 Jan, 2006 |
| 119 - 43 | OHV | 30 Jan, 2006 |
| 119 - 44 | ACK | 30 Jan, 2006 |
| 119 - 45 | SUB | 30 Jan, 2006 |
| 119 - 46 | SMA | 30 Jan, 2006 |
| 119 - 47 | OHV | 30 Jan, 2006 |
| 119 - 48 | OHV | 30 Jan, 2006 |
| 119 - 49 | OHV | 30 Jan, 2006 |
| 119 - 50 | ACK | 30 Jan, 2006 |
| 119 - 51 | SMA | 30 Jan, 2006 |
| 119 - 52 | ACK | 30 Jan, 2006 |
| 119 - 53 | NEP | 30 Jan, 2006 |
| 119 - 54 | SMA | 30 Jan, 2006 |
| 119 - 55 | DOI | 30 Jan, 2006 |
| 119 - 56 | WIL | 30 Jan, 2006 |
| 119 - 57 | WIL | 30 Jan, 2006 |
| 119 - 58 | ACK | 30 Jan, 2006 |
| 119 - 59 | TNE | 30 Jan, 2006 |
| 119 - 60 | TNE | 30 Jan, 2006 |
| 119 - 61 | TNE | 30 Jan, 2006 |
| 119 - 62 | TNE | 30 Jan, 2006 |
| 119 - 63 | TNE | 30 Jan, 2006 |
| 119 - 64 | TNE | 30 Jan, 2006 |
| 119 - 65 | TNE | 30 Jan, 2006 |
| 119 - 66 | VIS | 30 Jan, 2006 |
| 119 - 67 | VIS | 30 Jan, 2006 |
| 119 - 68 | VIS | 30 Jan, 2006 |
| 119 - 69 | VIS | 30 Jan, 2006 |
| 119 - 70 | ALT | 30 Jan, 2006 |
| 119 - 71 | SUB | 30 Jan, 2006 |
| 119 - 72 | SUB | 30 Jan, 2006 |
| 119 - 73 | SUB | 30 Jan, 2006 |
| 119 - 74 | SUB | 30 Jan, 2006 |

Blair, Melissa

| Alaska Coalition | | |
|------------------|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 119 - 75 | SUB | 30 Jan, 2006 |
| 119 - 76 | SUB | 30 Jan, 2006 |
| 119 - 77 | SUB | 30 Jan, 2006 |
| 119 - 78 | SUB | 30 Jan, 2006 |
| 119 - 79 | SUB | 30 Jan, 2006 |
| 119 - 80 | SUB | 30 Jan, 2006 |
| 119 - 81 | ROP | 30 Jan, 2006 |
| 119 - 82 | SUB | 30 Jan, 2006 |
| 119 - 83 | SUB | 30 Jan, 2006 |
| 119 - 84 | SUB | 30 Jan, 2006 |
| 119 - 85 | NEP | 30 Jan, 2006 |
| 119 - 86 | SUB | 30 Jan, 2006 |
| 119 - 87 | LAR | 30 Jan, 2006 |
| 119 - 88 | ACK | 30 Jan, 2006 |
| 119 - 89 | COR | 30 Jan, 2006 |
| 119 - 90 | LAR | 30 Jan, 2006 |
| 119 - 91 | ALT | 30 Jan, 2006 |
| 119 - 92 | ACK | 30 Jan, 2006 |
| 119 - 93 | ACC | 30 Jan, 2006 |
| 119 - 94 | ACC | 30 Jan, 2006 |
| 119 - 95 | ROP | 30 Jan, 2006 |
| 119 - 96 | ROP | 30 Jan, 2006 |
| 119 - 97 | ROP | 30 Jan, 2006 |
| 119 - 98 | NEP | 30 Jan, 2006 |
| 119 - 99 | LEA | 30 Jan, 2006 |
| 119 - 100 | NEP | 30 Jan, 2006 |
| 119 - 101 | DOI | 30 Jan, 2006 |
| 119 - 102 | ROP | 30 Jan, 2006 |
| 119 - 103 | ROP | 30 Jan, 2006 |
| 119 - 104 | ROP | 30 Jan, 2006 |
| 119 - 105 | ROP | 30 Jan, 2006 |
| 119 - 106 | ROP | 30 Jan, 2006 |
| 119 - 107 | ROP | 30 Jan, 2006 |
| 119 - 108 | ROP | 30 Jan, 2006 |
| 119 - 109 | ROP | 30 Jan, 2006 |
| 119 - 110 | ROP | 30 Jan, 2006 |
| 119 - 111 | ROP | 30 Jan, 2006 |
| 119 - 112 | ROP | 30 Jan, 2006 |
| 119 - 113 | ROP | 30 Jan, 2006 |
| 119 - 114 | ALT | 30 Jan, 2006 |
| 119 - 115 | LEA | 30 Jan, 2006 |
| 119 - 116 | CEF | 30 Jan, 2006 |
| 119 - 117 | LEA | 30 Jan, 2006 |
| 119 - 118 | LAR | 30 Jan, 2006 |
| 119 - 119 | DOI | 30 Jan, 2006 |
| 119 - 120 | LEA | 30 Jan, 2006 |
| 119 - 121 | ROP | 30 Jan, 2006 |

Blair, Melissa

| Alaska Coalition | | |
|------------------|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 119 - 122 | ROP | 30 Jan, 2006 |
| 119 - 123 | ROP | 30 Jan, 2006 |
| 119 - 124 | ROP | 30 Jan, 2006 |
| 119 - 125 | ROP | 30 Jan, 2006 |
| 119 - 126 | ROP | 30 Jan, 2006 |
| 119 - 127 | DOI | 30 Jan, 2006 |
| 119 - 128 | VEG | 30 Jan, 2006 |
| 119 - 129 | ROP | 30 Jan, 2006 |
| 119 - 130 | MAP | 30 Jan, 2006 |
| 119 - 131 | LEA | 30 Jan, 2006 |
| 119 - 132 | CLI | 30 Jan, 2006 |
| 119 - 133 | ACK | 30 Jan, 2006 |
| 119 - 134 | REN | 30 Jan, 2006 |
| 119 - 135 | REN | 30 Jan, 2006 |
| 119 - 136 | REN | 30 Jan, 2006 |
| 119 - 137 | REN | 30 Jan, 2006 |
| 119 - 138 | REN | 30 Jan, 2006 |
| 119 - 139 | REN | 30 Jan, 2006 |
| 119 - 140 | REN | 30 Jan, 2006 |
| 119 - 141 | REN | 30 Jan, 2006 |
| 119 - 142 | WLD | 30 Jan, 2006 |
| 119 - 143 | WLD | 30 Jan, 2006 |
| 119 - 144 | ACK | 30 Jan, 2006 |
| 119 - 145 | WLD | 30 Jan, 2006 |
| 119 - 146 | ACK | 30 Jan, 2006 |
| 119 - 147 | ACK | 30 Jan, 2006 |

Blake, Seana

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Blank, Patricia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 111 - 1 | ACK | 30 Jan, 2006 |

Blank, Patricia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 111 - 2 | SMA | 30 Jan, 2006 |
| 111 - 3 | SMA | 30 Jan, 2006 |
| 111 - 4 | EFM | 30 Jan, 2006 |
| 111 - 5 | SMA | 30 Jan, 2006 |
| 111 - 6 | ACK | 30 Jan, 2006 |

Bluhm, Pamala

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Boldt, Todd

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Bond, Alyssa

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Bonilla-jones, Carmen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |

Bonilla-jones, Carmen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Borell, Steven C.

Alaska Miners Association, Inc.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 41 - 1 | NEP | 21 Dec, 2005 |
| 41 - 2 | ACK | 21 Dec, 2005 |
| 41 - 3 | ACK | 21 Dec, 2005 |
| 41 - 4 | SMA | 21 Dec, 2005 |
| 41 - 5 | EDI | 21 Dec, 2005 |
| 41 - 6 | LOC | 21 Dec, 2005 |
| 41 - 7 | LAR | 21 Dec, 2005 |
| 41 - 8 | ACK | 21 Dec, 2005 |
| 41 - 9 | LAR | 21 Dec, 2005 |
| 41 - 10 | ACC | 21 Dec, 2005 |
| 41 - 11 | MAP | 21 Dec, 2005 |
| 41 - 12 | MAP | 21 Dec, 2005 |
| 41 - 13 | ACK | 21 Dec, 2005 |
| 41 - 14 | EDI | 21 Dec, 2005 |
| 41 - 15 | EDI | 21 Dec, 2005 |
| 41 - 16 | EDI | 21 Dec, 2005 |
| 41 - 17 | EDI | 21 Dec, 2005 |
| 41 - 18 | EDI | 21 Dec, 2005 |
| 41 - 19 | MAP | 21 Dec, 2005 |
| 41 - 20 | EDI | 21 Dec, 2005 |
| 41 - 21 | EDI | 21 Dec, 2005 |
| 41 - 22 | EDI | 21 Dec, 2005 |
| 41 - 23 | EDI | 21 Dec, 2005 |
| 41 - 24 | LAR | 21 Dec, 2005 |
| 41 - 25 | EDI | 21 Dec, 2005 |
| 41 - 26 | EDI | 21 Dec, 2005 |
| 41 - 27 | EDI | 21 Dec, 2005 |
| 41 - 28 | EDI | 21 Dec, 2005 |
| 41 - 29 | EDI | 21 Dec, 2005 |
| 41 - 30 | EDI | 21 Dec, 2005 |
| 41 - 31 | EDI | 21 Dec, 2005 |
| 41 - 32 | EDI | 21 Dec, 2005 |
| 41 - 33 | EDI | 21 Dec, 2005 |

Boswell, Harold

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Bragg, Dawn

Alaskans for Palmer Hay Flats SGR

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 73 - 1 | ACK | 12 Jan, 2006 |
| 73 - 2 | ALT | 12 Jan, 2006 |
| 73 - 3 | ACK | 12 Jan, 2006 |
| 73 - 4 | ACK | 12 Jan, 2006 |
| 73 - 5 | ALT | 12 Jan, 2006 |
| 73 - 6 | ACK | 12 Jan, 2006 |
| 73 - 7 | ACK | 12 Jan, 2006 |

Branyan, Jane

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Breiding, Joan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Brenner, Jared

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Brenner, Jared

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Brensinger, Elizabeth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Brogan, Loretta

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 53 - 1 | ACK | 28 Jan, 2006 |
| 53 - 2 | SMA | 28 Jan, 2006 |
| 53 - 3 | SMA | 28 Jan, 2006 |
| 53 - 4 | SMA | 28 Jan, 2006 |
| 53 - 5 | NEP | 28 Jan, 2006 |
| F1 - 1 | ACK | 27 Dec, 2005 |
| F1 - 2 | SMA | 27 Dec, 2005 |
| F1 - 3 | ACK | 27 Dec, 2005 |
| F1 - 4 | SMA | 27 Dec, 2005 |
| F1 - 5 | ACK | 27 Dec, 2005 |

Brooks, C. Wayne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Brooks, C. Wayne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Brown, Carle L.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 25 Dec, 2005 |
| F1 - 2 | SMA | 25 Dec, 2005 |
| F1 - 3 | ACK | 25 Dec, 2005 |
| F1 - 4 | SMA | 25 Dec, 2005 |
| F1 - 5 | ACK | 25 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Buehl, Barbara

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Burack, Debbie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Burch, David Paul Xavier

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Burdin, Jared

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Burns, David

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Busse, Barbara

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Butler, Darrol

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Buzby, Stacey

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| 6 - 1 | ACK | 08 Dec, 2005 |
| 6 - 2 | NEP | 08 Dec, 2005 |

Buzby, Stacey

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

Byrnes, James M.

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| 39 - 1 | ACK | 30 Jan, 2006 |
| 39 - 2 | ACK | 30 Jan, 2006 |
| 39 - 3 | OHV | 30 Jan, 2006 |
| 39 - 4 | NAT | 30 Jan, 2006 |

C

Cail, Bonnie

| Comment# | | Issue | Submitted On |
|----------|-----|-------|--------------|
| F1 - 1 | ACK | | 15 Dec, 2005 |
| F1 - 2 | SMA | | 15 Dec, 2005 |
| F1 - 3 | ACK | | 15 Dec, 2005 |
| F1 - 4 | SMA | | 15 Dec, 2005 |
| F1 - 5 | ACK | | 15 Dec, 2005 |

Camara, Tom

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Campbell, Alicia

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Capotorto, Jeanette

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Cassidy, Doris

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Castellon, Leigh

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Chalkley, Celena

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Chaney, Trish

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Chapin, Ginger

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 21 Dec, 2005 |
| F1 - 2 | SMA | 21 Dec, 2005 |
| F1 - 3 | ACK | 21 Dec, 2005 |
| F1 - 4 | SMA | 21 Dec, 2005 |
| F1 - 5 | ACK | 21 Dec, 2005 |

Chartier, Michele

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 24 Dec, 2005 |
| F1 - 2 | SMA | 24 Dec, 2005 |
| F1 - 3 | ACK | 24 Dec, 2005 |
| F1 - 4 | SMA | 24 Dec, 2005 |
| F1 - 5 | ACK | 24 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Chasse, Joe

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Cherry, Mary

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Chesnutt, Judy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Chinni, Adrienne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Chisholm, Holly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |

Chisholm, Holly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Chriest, Shawn

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Christofus Blackstone, Debo

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 01 Jan, 2006 |
| F1 - 2 | SMA | 01 Jan, 2006 |
| F1 - 3 | ACK | 01 Jan, 2006 |
| F1 - 4 | SMA | 01 Jan, 2006 |
| F1 - 5 | ACK | 01 Jan, 2006 |

Clark, Todd

Alaska Outdoor Access Alliance

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 14 - 1 | ACK | 14 Dec, 2005 |
| 14 - 2 | ACK | 14 Dec, 2005 |
| 14 - 3 | OHV | 14 Dec, 2005 |
| 14 - 4 | OHV | 14 Dec, 2005 |
| 14 - 5 | OHV | 14 Dec, 2005 |
| 14 - 6 | SMA | 14 Dec, 2005 |
| 29 - 1 | ACK | 30 Jan, 2006 |
| 29 - 2 | OHV | 30 Jan, 2006 |
| 29 - 3 | ACK | 30 Jan, 2006 |
| 29 - 4 | SMA | 30 Jan, 2006 |
| 29 - 5 | SMA | 30 Jan, 2006 |
| 29 - 6 | WIL | 30 Jan, 2006 |
| 29 - 7 | OHV | 30 Jan, 2006 |
| 29 - 8 | ACK | 30 Jan, 2006 |
| 29 - 9 | WIL | 30 Jan, 2006 |
| 29 - 10 | ACK | 30 Jan, 2006 |
| 30 - 1 | NEP | 20 Dec, 2005 |
| 30 - 2 | NEP | 20 Dec, 2005 |
| 30 - 3 | NEP | 20 Dec, 2005 |

Clark, Todd

Alaska Outdoor Access Alliance

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 30 - 4 | NEP | 20 Dec, 2005 |
| 30 - 5 | NEP | 20 Dec, 2005 |
| 112 - 1 | ACK | 30 Jan, 2006 |
| 112 - 2 | OHV | 30 Jan, 2006 |
| 112 - 3 | OHV | 30 Jan, 2006 |
| 112 - 4 | ACK | 30 Jan, 2006 |
| 112 - 5 | SMA | 30 Jan, 2006 |
| 112 - 6 | WIL | 30 Jan, 2006 |
| 112 - 7 | ACK | 30 Jan, 2006 |
| 112 - 8 | WIL | 30 Jan, 2006 |
| 112 - 9 | OHV | 30 Jan, 2006 |
| 112 - 10 | ACK | 30 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Cleland, C.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 28 Dec, 2005 |
| F1 - 2 | SMA | 28 Dec, 2005 |
| F1 - 3 | ACK | 28 Dec, 2005 |
| F1 - 4 | SMA | 28 Dec, 2005 |
| F1 - 5 | ACK | 28 Dec, 2005 |

Cleland, C.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

Clemens, Kimberly

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Clift, Philip A.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Colon, Jannice

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |

Colon, Jannice

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Comeskey, John

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Cone, Frances

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|---------|-----|--------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| 100 - 1 | ACK | 12 Jan, 2006 |
| 100 - 2 | SMA | 12 Jan, 2006 |
| 100 - 3 | SMA | 12 Jan, 2006 |
| 100 - 4 | VIS | 12 Jan, 2006 |
| 100 - 5 | NEP | 12 Jan, 2006 |
| 100 - 6 | ACK | 12 Jan, 2006 |

Conn, Craig C.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |

Conn, Craig C.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Coon, Julie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |

Cooper, Jill

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Cosgriff, Mark

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Costeas, Lanie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

Costeas, Lanie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Coutts, Dick

Butte Community Council

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| 3 - 1 | ACK | 08 Dec, 2005 |
| 3 - 2 | OHV | 08 Dec, 2005 |
| 3 - 3 | ACK | 08 Dec, 2005 |
| 31 - 1 | ACK | 21 Jan, 2006 |
| 31 - 2 | ACC | 21 Jan, 2006 |
| 31 - 3 | ACC | 21 Jan, 2006 |
| 31 - 4 | ACK | 21 Jan, 2006 |
| 31 - 5 | OHV | 21 Jan, 2006 |
| 31 - 6 | ACK | 21 Jan, 2006 |
| 31 - 7 | OHV | 21 Jan, 2006 |

Coviello, Gina

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Cox, Vickie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Crane, Steve

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 72 - 1 | LAR | |
| 72 - 2 | REC | |
| 72 - 3 | OHV | |

Cross, Heather

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Crupi, Lori

Haines Borough Assembly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 88 - 1 | ACK | 28 Dec, 2005 |
| 88 - 2 | SMA | 28 Dec, 2005 |
| 88 - 3 | SMA | 28 Dec, 2005 |
| 88 - 4 | ACK | 28 Dec, 2005 |
| 88 - 5 | WSR | 28 Dec, 2005 |
| 88 - 6 | NEP | 28 Dec, 2005 |
| 89 - 1 | ACK | 28 Dec, 2005 |
| 89 - 2 | SMA | 28 Dec, 2005 |
| 89 - 3 | SMA | 28 Dec, 2005 |
| 89 - 4 | SMA | 28 Dec, 2005 |
| 89 - 5 | SMA | 28 Dec, 2005 |
| 89 - 6 | ACK | 28 Dec, 2005 |
| 89 - 7 | WSR | 28 Dec, 2005 |
| 89 - 8 | NEP | 28 Dec, 2005 |
| 90 - 1 | ACK | 28 Dec, 2005 |
| 90 - 2 | SMA | 28 Dec, 2005 |
| 90 - 3 | SMA | 28 Dec, 2005 |
| 90 - 4 | WSR | 28 Dec, 2005 |
| 90 - 5 | NEP | 28 Dec, 2005 |

Cueny, Colleen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Cueny, Colleen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| | | |

Culbeck, Darsie

Alaska Mountain Guides

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 62 - 1 | ACK | |
| 62 - 2 | ACK | |
| 62 - 3 | ACK | |
| 62 - 4 | REC | |

Cummings, Terry

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Curotto, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Curtis, Kevin L.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

D**Dadourian, Laurie**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 40 - 1 | SMA | 27 Dec, 2005 |
| 40 - 2 | WIL | 27 Dec, 2005 |
| 40 - 3 | SMA | 27 Dec, 2005 |
| 40 - 4 | SMA | 27 Dec, 2005 |
| 40 - 5 | WIL | 27 Dec, 2005 |
| 40 - 6 | ACK | 27 Dec, 2005 |
| 40 - 7 | NEP | 27 Dec, 2005 |

Dale, Adrienne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Danford, Frank

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 116 - 1 | ACK | 30 Nov, 2005 |

Daniel, Shively

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |

Daniel, Shively

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 07 Dec, 2005 |

Daniels, J. Scott

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Davis, Howard T.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 38 - 1 | LAR | 27 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Defranco, Adam

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Defranco, Adam

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

Delker, Jennifer

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Denison, James

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| 60 - 1 | ACK | 07 Dec, 2005 |
| 60 - 2 | ACK | 07 Dec, 2005 |
| 60 - 3 | SMA | 07 Dec, 2005 |
| 60 - 4 | ACK | 07 Dec, 2005 |
| 60 - 5 | SMA | 07 Dec, 2005 |
| 60 - 6 | ACK | 07 Dec, 2005 |

Depadova, E.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Desbrow, Stacy

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |

Desbrow, Stacy

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Desousa, Sarah

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Devine, Lauren

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Dixon, Jerry S.

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| 70 - 1 | ACK | 16 Dec, 2005 |
| 70 - 2 | SMA | 16 Dec, 2005 |
| 70 - 3 | SMA | 16 Dec, 2005 |
| 70 - 4 | ACK | 16 Dec, 2005 |
| 70 - 5 | SMA | 16 Dec, 2005 |
| 94 - 1 | ACK | 11 Jan, 2006 |
| 94 - 2 | SMA | 11 Jan, 2006 |
| 94 - 3 | SMA | 11 Jan, 2006 |
| 94 - 4 | VIS | 11 Jan, 2006 |
| 94 - 5 | NEP | 11 Jan, 2006 |
| 94 - 6 | ACK | 11 Jan, 2006 |

Dollyhigh, Adrienne

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Dolney, Rachel

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Donnelly, Stephen

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Donnici, Anthony

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Donnici, Anthony

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Doran, Bonnie

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Dorstenia, Kaj

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|---------|-----|--------------|
| 118 - 1 | ACK | 06 Dec, 2005 |
| 118 - 2 | SMA | 06 Dec, 2005 |
| 118 - 3 | ACK | 06 Dec, 2005 |
| 118 - 4 | SMA | 06 Dec, 2005 |
| 118 - 5 | ACK | 06 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Douglas, Virginia

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |

Douglas, Virginia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 07 Dec, 2005 |

Doyle, Patricia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Dubber, Leonard

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 1 - 1 | ACK | 17 Nov, 2005 |
| 1 - 2 | WIL | 17 Nov, 2005 |
| 1 - 3 | ACK | 17 Nov, 2005 |
| 1 - 4 | ACK | 17 Nov, 2005 |
| 1 - 5 | WIL | 17 Nov, 2005 |

Duffy, Abigail

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |

Dugan, Robert G.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 93 - 1 | SMA | 09 Jan, 2006 |
| 93 - 2 | SMA | 09 Jan, 2006 |
| 93 - 3 | VIS | 09 Jan, 2006 |
| 93 - 4 | NEP | 09 Jan, 2006 |
| 109 - 1 | ACK | 23 Jan, 2006 |
| 109 - 2 | SMA | 23 Jan, 2006 |
| 109 - 3 | VIS | 23 Jan, 2006 |
| 109 - 4 | ACK | 23 Jan, 2006 |
| 109 - 5 | NEP | 23 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Dugan, Robert G.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Duncan, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 21 Jan, 2006 |
| F2 - 2 | SMA | 21 Jan, 2006 |
| F2 - 3 | SMA | 21 Jan, 2006 |
| F2 - 4 | VIS | 21 Jan, 2006 |
| F2 - 5 | NEP | 21 Jan, 2006 |
| F1 - 1 | ACK | 24 Dec, 2005 |
| F1 - 2 | SMA | 24 Dec, 2005 |
| F1 - 3 | ACK | 24 Dec, 2005 |
| F1 - 4 | SMA | 24 Dec, 2005 |
| F1 - 5 | ACK | 24 Dec, 2005 |

Dunham, Christopher

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 16 Dec, 2005 |
| F1 - 2 | SMA | 16 Dec, 2005 |
| F1 - 3 | ACK | 16 Dec, 2005 |
| F1 - 4 | SMA | 16 Dec, 2005 |
| F1 - 5 | ACK | 16 Dec, 2005 |

Dunkleberger, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Durham, Crystal

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 26 Jan, 2006 |
| F2 - 2 | SMA | 26 Jan, 2006 |
| F2 - 3 | SMA | 26 Jan, 2006 |
| F2 - 4 | VIS | 26 Jan, 2006 |
| F2 - 5 | NEP | 26 Jan, 2006 |
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

E**Eades, Debra**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Eagle, Nee

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Eiterman, Elisabeth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Eiterman, Elisabeth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Ekman, Lea

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Ely, Thomas

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Enevoldsen, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Engstrom, Neil

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |

Engstrom, Neil

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Escobar, Annette

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Esra, Nijn

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Evans, Michael W.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

F**Facette, Jim**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |

Facette, Jim

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Fairfield, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Family, Zmuda

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Fasczewski, Joan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Fenster, Steven

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Ferguson, Joanne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Ferris, C.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Ferry, Susan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 18 Jan, 2006 |
| F2 - 2 | SMA | 18 Jan, 2006 |
| F2 - 3 | SMA | 18 Jan, 2006 |
| F2 - 4 | VIS | 18 Jan, 2006 |
| F2 - 5 | NEP | 18 Jan, 2006 |

Field, Kimberly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 21 Dec, 2005 |
| F1 - 2 | SMA | 21 Dec, 2005 |
| F1 - 3 | ACK | 21 Dec, 2005 |
| F1 - 4 | SMA | 21 Dec, 2005 |
| F1 - 5 | ACK | 21 Dec, 2005 |

Figueiredo, Eva

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Fine, Doug

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 76 - 1 | ACK | 24 Dec, 2005 |
| 76 - 2 | REC | 24 Dec, 2005 |
| 76 - 3 | ACK | 24 Dec, 2005 |

Fitch, James

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Flowers, Chris

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 78 - 1 | ACK | 27 Dec, 2005 |
| 78 - 2 | ACK | 27 Dec, 2005 |
| 78 - 3 | ACK | 27 Dec, 2005 |
| 78 - 4 | ACK | 27 Dec, 2005 |
| 78 - 5 | VIS | 27 Dec, 2005 |

Fogleman, Maxwell

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |

Fogleman, Maxwell

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 15 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Fogler, Marah

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Ford, James

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Foskett, Mary Anna

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 17 Jan, 2006 |
| F2 - 2 | SMA | 17 Jan, 2006 |
| F2 - 3 | SMA | 17 Jan, 2006 |
| F2 - 4 | VIS | 17 Jan, 2006 |
| F2 - 5 | NEP | 17 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Fouroux Iii, Henri Andre

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 17 Jan, 2006 |

Fouroux Iii, Henri Andre

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 2 | SMA | 17 Jan, 2006 |
| F2 - 3 | SMA | 17 Jan, 2006 |
| F2 - 4 | VIS | 17 Jan, 2006 |
| F2 - 5 | NEP | 17 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Frank, Harriette

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Fries, Carol

Alaska Department of Natural Resourc

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 33 - 1 | NEP | 30 Jan, 2006 |
| 33 - 2 | COR | 30 Jan, 2006 |
| 33 - 3 | COR | 30 Jan, 2006 |
| 33 - 4 | ACK | 30 Jan, 2006 |
| 33 - 5 | ACK | 30 Jan, 2006 |
| 33 - 6 | LAR | 30 Jan, 2006 |
| 33 - 7 | ACK | 30 Jan, 2006 |
| 33 - 8 | DOI | 30 Jan, 2006 |
| 33 - 9 | ACK | 30 Jan, 2006 |
| 33 - 10 | ACK | 30 Jan, 2006 |
| 33 - 11 | SMA | 30 Jan, 2006 |
| 33 - 12 | ACK | 30 Jan, 2006 |
| 33 - 13 | LAR | 30 Jan, 2006 |
| 33 - 14 | EDI | 30 Jan, 2006 |
| 33 - 15 | EDI | 30 Jan, 2006 |
| 33 - 16 | EDI | 30 Jan, 2006 |
| 33 - 17 | EDI | 30 Jan, 2006 |
| 33 - 18 | EDI | 30 Jan, 2006 |
| 33 - 19 | ACK | 30 Jan, 2006 |
| 33 - 20 | LAR | 30 Jan, 2006 |
| 33 - 21 | ACK | 30 Jan, 2006 |
| 33 - 22 | OHV | 30 Jan, 2006 |
| 33 - 23 | EDI | 30 Jan, 2006 |

Fries, Carol

Alaska Department of Natural Resourc

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 33 - 24 | ACK | 30 Jan, 2006 |
| 33 - 25 | CLI | 30 Jan, 2006 |
| 33 - 26 | ACK | 30 Jan, 2006 |
| 33 - 27 | EDI | 30 Jan, 2006 |
| 33 - 28 | EDI | 30 Jan, 2006 |
| 33 - 29 | ACK | 30 Jan, 2006 |
| 33 - 30 | EDI | 30 Jan, 2006 |
| 33 - 31 | EDI | 30 Jan, 2006 |
| 33 - 32 | EDI | 30 Jan, 2006 |
| 33 - 33 | EDI | 30 Jan, 2006 |
| 33 - 34 | EDI | 30 Jan, 2006 |
| 33 - 35 | EDI | 30 Jan, 2006 |
| 33 - 36 | MAP | 30 Jan, 2006 |
| 33 - 37 | EDI | 30 Jan, 2006 |
| 33 - 38 | EDI | 30 Jan, 2006 |
| 33 - 39 | EDI | 30 Jan, 2006 |
| 33 - 40 | EDI | 30 Jan, 2006 |
| 33 - 41 | EDI | 30 Jan, 2006 |
| 33 - 42 | ACK | 30 Jan, 2006 |
| 33 - 43 | EDI | 30 Jan, 2006 |
| 33 - 44 | EDI | 30 Jan, 2006 |
| 33 - 45 | OHV | 30 Jan, 2006 |
| 33 - 46 | EDI | 30 Jan, 2006 |
| 33 - 47 | EDI | 30 Jan, 2006 |
| 33 - 48 | EDI | 30 Jan, 2006 |
| 33 - 49 | EDI | 30 Jan, 2006 |
| 33 - 50 | EDI | 30 Jan, 2006 |
| 33 - 51 | EDI | 30 Jan, 2006 |
| 33 - 52 | EDI | 30 Jan, 2006 |
| 33 - 53 | EDI | 30 Jan, 2006 |
| 33 - 54 | EDI | 30 Jan, 2006 |
| 33 - 55 | ACK | 30 Jan, 2006 |
| 33 - 56 | ACK | 30 Jan, 2006 |
| 33 - 57 | MAP | 30 Jan, 2006 |
| 33 - 58 | EDI | 30 Jan, 2006 |
| 33 - 59 | ACK | 30 Jan, 2006 |
| 33 - 60 | ROP | 30 Jan, 2006 |
| 33 - 61 | ROP | 30 Jan, 2006 |
| 33 - 62 | ACK | 30 Jan, 2006 |
| 33 - 63 | MAP | 30 Jan, 2006 |
| 33 - 64 | EDI | 30 Jan, 2006 |
| 33 - 65 | EDI | 30 Jan, 2006 |
| 33 - 66 | ACK | 30 Jan, 2006 |
| 33 - 67 | EDI | 30 Jan, 2006 |
| 33 - 68 | ACK | 30 Jan, 2006 |
| 33 - 69 | NEP | 30 Jan, 2006 |
| 33 - 70 | COR | 30 Jan, 2006 |

Fries, Carol

Alaska Department of Natural Resourc

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 33 - 71 | ACK | 30 Jan, 2006 |

Fritz, Cecily

Knik River Watershed Group

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 8 - 1 | ACK | 08 Dec, 2005 |
| 8 - 2 | NEP | 08 Dec, 2005 |
| 8 - 3 | SMA | 08 Dec, 2005 |
| 8 - 4 | ACK | 08 Dec, 2005 |
| 8 - 5 | SMA | 08 Dec, 2005 |
| 47 - 1 | ACK | 26 Dec, 2005 |
| 47 - 2 | ACK | 26 Dec, 2005 |
| 47 - 3 | COR | 26 Dec, 2005 |
| 47 - 4 | MAP | 26 Dec, 2005 |
| 47 - 5 | ACK | 26 Dec, 2005 |
| 47 - 6 | NEP | 26 Dec, 2005 |
| 59 - 1 | ACK | 03 Nov, 2005 |

G**Gabrisko, Tracie**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Gage, Cathy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Galiati, Ronald J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |

Galiati, Ronald J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Gannon, Michele

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Gaydon, Sandra

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Gentile, Ronald

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |

Gentile, Ronald

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 12 Dec, 2005 |

Georgiou, Christine

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Getz, Caroline

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Giammatteo, Joseph

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Gibbs-halm, Deborah

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |

Gibbs-halm, Deborah

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Gilbert, Valerie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Gille, Greg

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 61 - 1 | ACK | 07 Dec, 2005 |
| 61 - 2 | SMA | 07 Dec, 2005 |
| 61 - 3 | ACK | 07 Dec, 2005 |
| 61 - 4 | SMA | 07 Dec, 2005 |
| 61 - 5 | ACK | 07 Dec, 2005 |
| 104 - 1 | ACK | 14 Jan, 2006 |
| 104 - 2 | SMA | 14 Jan, 2006 |
| 104 - 3 | SMA | 14 Jan, 2006 |
| 104 - 4 | VIS | 14 Jan, 2006 |
| 104 - 5 | NEP | 14 Jan, 2006 |

Giniewicz, Deborah

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |

Giniewicz, Deborah

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Gintz, Aimee

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Gols, L.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Gomez, Maria

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Gore, Jesse

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Gore, Jesse

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Graf, Rosemary

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Graham, Kimberley

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Grasso, Dori

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Gray, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 28 Dec, 2005 |
| F1 - 2 | SMA | 28 Dec, 2005 |

Gray, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 28 Dec, 2005 |
| F1 - 4 | SMA | 28 Dec, 2005 |
| F1 - 5 | ACK | 28 Dec, 2005 |

Graziosa, Sara

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Green, Jason J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Gregory, Branwen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 101 - 1 | ACK | 12 Jan, 2006 |
| 101 - 2 | SMA | 12 Jan, 2006 |
| 101 - 3 | SMA | 12 Jan, 2006 |
| 101 - 4 | VIS | 12 Jan, 2006 |
| 101 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |

Gregory, Branwen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 08 Dec, 2005 |

Griffin, Dorothy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 65 - 1 | SMA | 11 Dec, 2005 |

Grover, Ravi

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Grueschow Jr., Kenneth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Gunn, Mardell

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 220 - | | 30 Jan, 2006 |

Guthrie, Barbara

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |

Guthrie, Barbara

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 5 | NEP | 13 Jan, 2006 |

Gutkowski, Marie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Gutman, Mark

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

H**Hafer, Sarah**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Halligan, Mary

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 30 Jan, 2006 |
| F2 - 2 | SMA | 30 Jan, 2006 |
| F2 - 3 | SMA | 30 Jan, 2006 |
| F2 - 4 | VIS | 30 Jan, 2006 |
| F2 - 5 | NEP | 30 Jan, 2006 |
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Hand, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Handwerker, Steven

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Hansen, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 46 - 1 | ACK | 20 Dec, 2005 |
| 46 - 2 | NEP | 20 Dec, 2005 |

Harlib, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 58 - 1 | ACK | |
| 58 - 2 | NEP | |
| F2 - 1 | ACK | 24 Jan, 2006 |
| F2 - 2 | SMA | 24 Jan, 2006 |
| F2 - 3 | SMA | 24 Jan, 2006 |

Harlib, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 4 | VIS | 24 Jan, 2006 |
| F2 - 5 | NEP | 24 Jan, 2006 |

Harrington, Sue

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |

Haskell, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Hatton, Elizabeth

Alaska Quiet Rights Coalition

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 45 - 1 | ACK | 14 Dec, 2005 |
| 45 - 2 | SMA | 14 Dec, 2005 |
| 45 - 3 | ACK | 14 Dec, 2005 |
| 45 - 4 | DOI | 14 Dec, 2005 |
| 45 - 5 | ACK | 14 Dec, 2005 |
| 45 - 6 | WIL | 14 Dec, 2005 |
| 45 - 7 | WIL | 14 Dec, 2005 |
| 45 - 8 | WIL | 14 Dec, 2005 |
| 45 - 9 | SMA | 14 Dec, 2005 |
| 45 - 10 | NEP | 14 Dec, 2005 |

Haugen, Lisa

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Haugen, Lisa

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Heasley, Lenora

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Hedges, Buddy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Heinold, Christian

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Heitman, Carolyn

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 117 - 1 | | 01 Dec, 2005 |

Hensley, Candi

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |

Herdlika, Robert

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Hermann, Richard

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Herminghaus, Trisha

Alaska Quiet Rights Coalition

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 17 - 1 | ACK | 11 Nov, 2005 |
| 17 - 2 | SMA | 11 Nov, 2005 |
| 17 - 3 | ACK | 11 Nov, 2005 |
| 17 - 4 | SMA | 11 Nov, 2005 |
| 17 - 5 | COR | 11 Nov, 2005 |
| 17 - 6 | ACK | 11 Nov, 2005 |
| 17 - 7 | SMA | 11 Nov, 2005 |
| 17 - 8 | COR | 11 Nov, 2005 |
| 17 - 9 | ACK | 11 Nov, 2005 |
| 17 - 10 | COR | 11 Nov, 2005 |
| 17 - 11 | OHV | 11 Nov, 2005 |
| 17 - 12 | OHV | 11 Nov, 2005 |

Herminghaus, Trisha

Alaska Quiet Rights Coalition

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 17 - 13 | NEP | 11 Nov, 2005 |

Herndon, Laura

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Hert, Diane

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Hessel, Sue

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 16 Dec, 2005 |
| F1 - 2 | SMA | 16 Dec, 2005 |
| F1 - 3 | ACK | 16 Dec, 2005 |
| F1 - 4 | SMA | 16 Dec, 2005 |
| F1 - 5 | ACK | 16 Dec, 2005 |

Hettinger, Ann

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Heughins, Russ

Idaho Wildlife Federation

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 27 - 1 | ACK | 29 Dec, 2005 |
| 27 - 2 | NEP | 29 Dec, 2005 |
| 27 - 3 | ACK | 29 Dec, 2005 |
| 27 - 4 | SMA | 29 Dec, 2005 |
| 27 - 5 | ACK | 29 Dec, 2005 |
| 27 - 6 | SMA | 29 Dec, 2005 |
| 27 - 7 | COR | 29 Dec, 2005 |
| 27 - 8 | ACK | 29 Dec, 2005 |
| 27 - 9 | SMA | 29 Dec, 2005 |
| 27 - 10 | NEP | 29 Dec, 2005 |
| 27 - 11 | ACK | 29 Dec, 2005 |

Hill, William Kay

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Hobbs, Melissa

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Hodapp, Natalie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 19 Jan, 2006 |
| F2 - 2 | SMA | 19 Jan, 2006 |
| F2 - 3 | SMA | 19 Jan, 2006 |
| F2 - 4 | VIS | 19 Jan, 2006 |
| F2 - 5 | NEP | 19 Jan, 2006 |
| F1 - 1 | ACK | 28 Dec, 2005 |

Hodapp, Natalie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 28 Dec, 2005 |
| F1 - 3 | ACK | 28 Dec, 2005 |
| F1 - 4 | SMA | 28 Dec, 2005 |
| F1 - 5 | ACK | 28 Dec, 2005 |

Holle, Eric

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 16 - 1 | ACK | 17 Nov, 2005 |
| 16 - 2 | SMA | 17 Nov, 2005 |
| 16 - 3 | ACK | 17 Nov, 2005 |
| 16 - 4 | CEF | 17 Nov, 2005 |
| 16 - 5 | OHV | 17 Nov, 2005 |
| 16 - 6 | ACK | 17 Nov, 2005 |
| 16 - 7 | COR | 17 Nov, 2005 |
| 16 - 8 | ACK | 17 Nov, 2005 |
| 16 - 9 | WSR | 17 Nov, 2005 |
| 16 - 10 | WSR | 17 Nov, 2005 |
| 16 - 11 | REC | 17 Nov, 2005 |
| 16 - 12 | ACK | 17 Nov, 2005 |
| 16 - 13 | LAR | 17 Nov, 2005 |

Horn, Lenora

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Howard, Robert

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 22 - 1 | ACK | 27 Dec, 2005 |
| 22 - 2 | ACK | 27 Dec, 2005 |
| 22 - 3 | ACK | 27 Dec, 2005 |
| 22 - 4 | ACK | 27 Dec, 2005 |
| 22 - 5 | OHV | 27 Dec, 2005 |
| 22 - 6 | OHV | 27 Dec, 2005 |
| 22 - 7 | OHV | 27 Dec, 2005 |
| 22 - 8 | OHV | 27 Dec, 2005 |
| 22 - 9 | OHV | 27 Dec, 2005 |
| 22 - 10 | ACK | 27 Dec, 2005 |

Howard, Robert

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 22 - 11 | TNE | 27 Dec, 2005 |
| 22 - 12 | EFM | 27 Dec, 2005 |
| 22 - 13 | REC | 27 Dec, 2005 |
| 22 - 14 | ACK | 27 Dec, 2005 |
| 22 - 15 | ACK | 27 Dec, 2005 |
| 22 - 16 | HAZ | 27 Dec, 2005 |
| 22 - 17 | HAZ | 27 Dec, 2005 |
| 22 - 18 | NAT | 27 Dec, 2005 |
| 22 - 19 | NAT | 27 Dec, 2005 |
| 22 - 20 | COR | 27 Dec, 2005 |
| 22 - 21 | COR | 27 Dec, 2005 |
| 22 - 22 | ACK | 27 Dec, 2005 |
| 22 - 23 | ACK | 27 Dec, 2005 |

Huber, Alycia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Huggins, William

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Hughes, Judy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |

Hughes, Judy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Hunrichs, Paul

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Hunt, Otto J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Hutchinson, Dr. Terrance A

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Hutchison, Phyllis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Hval, Patricia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Hyatt, Donald

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Hydinger, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 16 Dec, 2005 |
| F1 - 2 | SMA | 16 Dec, 2005 |

Hydinger, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 16 Dec, 2005 |
| F1 - 4 | SMA | 16 Dec, 2005 |
| F1 - 5 | ACK | 16 Dec, 2005 |

Hyland, Anne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

J**Jacobsen, Paul**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

James, Rachel

Alaska Coalition

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 7 - 1 | ACK | 08 Dec, 2005 |
| 7 - 2 | NEP | 08 Dec, 2005 |
| 7 - 3 | SMA | 08 Dec, 2005 |
| 7 - 4 | NEP | 08 Dec, 2005 |
| 7 - 5 | ACK | 08 Dec, 2005 |
| 7 - 6 | ACK | 08 Dec, 2005 |
| 7 - 7 | ACK | 08 Dec, 2005 |
| 7 - 8 | ALT | 08 Dec, 2005 |
| 7 - 9 | SMA | 08 Dec, 2005 |
| 7 - 10 | ACK | 08 Dec, 2005 |
| 7 - 11 | ACK | 08 Dec, 2005 |

Jaslow, Douglas

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |

Jaslow, Douglas

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Jerden, Beverly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Jobe, Susan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |

Johnson, Curtis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 26 Dec, 2005 |
| F1 - 2 | SMA | 26 Dec, 2005 |
| F1 - 3 | ACK | 26 Dec, 2005 |
| F1 - 4 | SMA | 26 Dec, 2005 |
| F1 - 5 | ACK | 26 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |

Johnson, Curtis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Jonas, Mark

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 106 - 1 | ACK | 17 Jan, 2006 |
| 106 - 2 | SMA | 17 Jan, 2006 |
| 106 - 3 | SMA | 17 Jan, 2006 |
| 106 - 4 | VIS | 17 Jan, 2006 |
| 106 - 5 | NEP | 17 Jan, 2006 |

Jones, Sev

Matanuska-Susitna Borough

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 24 - 1 | NEP | 19 Dec, 2005 |
| 24 - 2 | ACK | 19 Dec, 2005 |
| 24 - 3 | ACK | 19 Dec, 2005 |
| 24 - 4 | COR | 19 Dec, 2005 |
| 24 - 5 | LEA | 19 Dec, 2005 |
| 24 - 6 | COR | 19 Dec, 2005 |
| 24 - 7 | COR | 19 Dec, 2005 |
| 24 - 8 | COR | 19 Dec, 2005 |
| 24 - 9 | COR | 19 Dec, 2005 |
| 24 - 10 | COR | 19 Dec, 2005 |
| 24 - 11 | ACK | 19 Dec, 2005 |
| 24 - 12 | COR | 19 Dec, 2005 |
| 24 - 13 | ACC | 19 Dec, 2005 |
| 24 - 14 | NEP | 19 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |

Jones, Sev

Matanuska-Susitna Borough

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Joranko, Roberta

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Jorgensen, James H.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Jud, Daniel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |

Jud, Daniel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Justice, Stan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 69 - 1 | SMA | 15 Dec, 2005 |
| 69 - 2 | ACK | 15 Dec, 2005 |

K**Kautz, Katherine**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Keefer, Nina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Kelly, Wayne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |

Kelly, Wayne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |

Kennedy, Bill

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Kirby, Alison

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Kirschling, Karen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Kittleson, Marcia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Klein, E.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |

Klein, E.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Knox, Janet

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Koenig, Stephen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Kolehmainen, Karol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 56 - 1 | ACK | 30 Jan, 2006 |

Kopp, Helen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 24 Jan, 2006 |
| F2 - 2 | SMA | 24 Jan, 2006 |
| F2 - 3 | SMA | 24 Jan, 2006 |
| F2 - 4 | VIS | 24 Jan, 2006 |
| F2 - 5 | NEP | 24 Jan, 2006 |

Kosar, Mary Lou

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |

Kosar, Mary Lou

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Kosek, Kateri

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Jan, 2006 |
| F1 - 2 | SMA | 09 Jan, 2006 |
| F1 - 3 | ACK | 09 Jan, 2006 |
| F1 - 4 | SMA | 09 Jan, 2006 |
| F1 - 5 | ACK | 09 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Koteles, Patty

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Kulcsar, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Kuny, Megaera

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Kuny, Megaera

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Kurland, Miriam Beth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

L**Lambrecht, Gretchen**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Lancaster, Emily

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |

Lancaster, Emily

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

Lareau, Audrey

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Larson, June

Pug Lovers Rescue

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |

Laschiava, Dona

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Latta, Natasha

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|---------|-----|--------------|
| 115 - 1 | NEP | 19 Dec, 2005 |
| 115 - 2 | SMA | 19 Dec, 2005 |
| 115 - 3 | ACK | 19 Dec, 2005 |
| 115 - 4 | NEP | 19 Dec, 2005 |

Lavoie, Monique

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Leach, Tim

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|---------|-----|--------------|
| 107 - 1 | ACK | 17 Jan, 2006 |
| 107 - 2 | SMA | 17 Jan, 2006 |
| 107 - 3 | SMA | 17 Jan, 2006 |
| 107 - 4 | VIS | 17 Jan, 2006 |
| 107 - 5 | NEP | 17 Jan, 2006 |
| 107 - 6 | ACK | 17 Jan, 2006 |

Ledden, Dennis

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Ledgerwood, Lynn

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |

Ledgerwood, Lynn

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Leeson, Mark

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Lemke, Melissa

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Leonard, Richard

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Levy, Andrea

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Lewis, Judi

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Libenson, Sue

Alaska Coalition

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| 81 - 1 | ACK | 28 Dec, 2005 |
| 81 - 2 | SMA | 28 Dec, 2005 |
| 81 - 3 | ACK | 28 Dec, 2005 |
| 81 - 4 | SMA | 28 Dec, 2005 |

Lien, David

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
|----------|-------|--------------|

| | | |
|--------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Lopez, Carmen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Loria, Steven

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Luke, Keth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Lushear, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 75 - 1 | ACK | 24 Dec, 2005 |
| 75 - 2 | SMA | 24 Dec, 2005 |
| 75 - 3 | SMA | 24 Dec, 2005 |
| 75 - 4 | ACK | 24 Dec, 2005 |

Lynch, Gail

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |

Lynch, Gail

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Lytle, Denise

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

M**M., Lexi**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Maddox, Charles

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |

Maddox, Charles

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Major, Mark

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Maloney, Kristie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 01 Jan, 2006 |
| F1 - 2 | SMA | 01 Jan, 2006 |
| F1 - 3 | ACK | 01 Jan, 2006 |
| F1 - 4 | SMA | 01 Jan, 2006 |
| F1 - 5 | ACK | 01 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Manuel, Dave

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Marchese, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Marchese, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Marks, Linda

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Martin, Donna

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Martin-brodak, Diane

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |

Martin-brodak, Diane

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Martinez, Doreen E.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Mason, Lorraine

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Mastenbrook, Marianne

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Mastri, Frank

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |

Mastri, Frank

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Mayo, Michael John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 17 Dec, 2005 |
| F1 - 2 | SMA | 17 Dec, 2005 |
| F1 - 3 | ACK | 17 Dec, 2005 |
| F1 - 4 | SMA | 17 Dec, 2005 |
| F1 - 5 | ACK | 17 Dec, 2005 |

Mccleary, Harriet

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Mcclintock, Cathy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Mccoy, Cherie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Mcdonough, Tim

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 71 - 1 | ACK | 20 Dec, 2005 |
| 71 - 2 | WIL | 20 Dec, 2005 |
| 71 - 3 | SMA | 20 Dec, 2005 |
| 71 - 4 | WIL | 20 Dec, 2005 |
| 71 - 5 | REC | 20 Dec, 2005 |

Mcginness, Doris

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Mcglone, Colleen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Mcguire, Sally

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 43 - 1 | ACK | 15 Dec, 2005 |
| 43 - 2 | ACK | 15 Dec, 2005 |
| 43 - 3 | REC | 15 Dec, 2005 |
| 43 - 4 | ACK | 15 Dec, 2005 |
| 43 - 5 | ACK | 15 Dec, 2005 |
| 43 - 6 | WIL | 15 Dec, 2005 |
| 43 - 7 | WIL | 15 Dec, 2005 |
| 43 - 8 | WIL | 15 Dec, 2005 |
| 43 - 9 | ACK | 15 Dec, 2005 |
| 43 - 10 | WIL | 15 Dec, 2005 |
| 43 - 11 | ACK | 15 Dec, 2005 |
| 43 - 12 | SMA | 15 Dec, 2005 |
| 43 - 13 | ACK | 15 Dec, 2005 |
| 43 - 14 | SOC | 15 Dec, 2005 |
| 43 - 15 | FSH | 15 Dec, 2005 |
| 43 - 16 | WIL | 15 Dec, 2005 |
| 43 - 17 | CUL | 15 Dec, 2005 |
| 43 - 18 | SMA | 15 Dec, 2005 |
| 43 - 19 | ACK | 15 Dec, 2005 |
| 43 - 20 | LAR | 15 Dec, 2005 |
| 43 - 21 | REN | 15 Dec, 2005 |
| 114 - 1 | ACK | 22 Dec, 2005 |
| 114 - 2 | SMA | 22 Dec, 2005 |
| 114 - 3 | WSR | 22 Dec, 2005 |
| 114 - 4 | ACK | 22 Dec, 2005 |

Mckew, Quinn

American Rivers

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 113 - 1 | NEP | 30 Jan, 2006 |
| 113 - 2 | ACK | 30 Jan, 2006 |
| 113 - 3 | WSR | 30 Jan, 2006 |
| 113 - 4 | ACK | 30 Jan, 2006 |
| 113 - 5 | WSR | 30 Jan, 2006 |
| 113 - 6 | WSR | 30 Jan, 2006 |
| 113 - 7 | WSR | 30 Jan, 2006 |
| 113 - 8 | WSR | 30 Jan, 2006 |
| 113 - 9 | WSR | 30 Jan, 2006 |
| 113 - 10 | WSR | 30 Jan, 2006 |
| 113 - 11 | WSR | 30 Jan, 2006 |
| 113 - 12 | SMA | 30 Jan, 2006 |
| 113 - 13 | SMA | 30 Jan, 2006 |
| 113 - 14 | SMA | 30 Jan, 2006 |
| 113 - 15 | SMA | 30 Jan, 2006 |
| 113 - 16 | SMA | 30 Jan, 2006 |
| 113 - 17 | ACK | 30 Jan, 2006 |

Mckew, Quinn

American Rivers

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 113 - 18 | DOI | 30 Jan, 2006 |
| 113 - 19 | ACK | 30 Jan, 2006 |
| 113 - 20 | WSR | 30 Jan, 2006 |
| 113 - 21 | WSR | 30 Jan, 2006 |
| 113 - 22 | WSR | 30 Jan, 2006 |
| 113 - 23 | WSR | 30 Jan, 2006 |
| 113 - 24 | NEP | 30 Jan, 2006 |

Meacham, Thomas E.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 91 - 1 | SMA | 29 Dec, 2005 |
| 91 - 2 | ACK | 29 Dec, 2005 |
| 91 - 3 | SMA | 29 Dec, 2005 |
| 91 - 4 | NEP | 29 Dec, 2005 |

Metcalf, Steve

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Metz, Michele

Sealaska Corporation

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 20 - 1 | NEP | 10 Jan, 2006 |
| 20 - 2 | ACK | 10 Jan, 2006 |
| 20 - 3 | SOC | 10 Jan, 2006 |
| 20 - 4 | NEP | 10 Jan, 2006 |
| 20 - 5 | AKN | 10 Jan, 2006 |
| 20 - 6 | NEP | 10 Jan, 2006 |

Meyer, Robert G.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Meyer, Robert G.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Mihok, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Mikalsen, Claire

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Miller, Nancy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Mitchell, Karen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Modarelli, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Mohn, Cynthia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Moore, Audrey

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Moran, Kate

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Moreno, Olyme

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Moss, Paul

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

Mullen, Elizabeth J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |

Mullen, Elizabeth J.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Murphy, Ryan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 17 Dec, 2005 |
| F1 - 2 | SMA | 17 Dec, 2005 |
| F1 - 3 | ACK | 17 Dec, 2005 |
| F1 - 4 | SMA | 17 Dec, 2005 |
| F1 - 5 | ACK | 17 Dec, 2005 |
| F1 - 1 | ACK | |
| F1 - 2 | SMA | |
| F1 - 3 | ACK | |
| F1 - 4 | SMA | |
| F1 - 5 | ACK | |

Murray, Cristy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Musen, Arthur

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Mustich, Joseph A.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Myers, Adele

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

N**Navarrete, Patty**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Negri, Regina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Neiman, Karl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |

Neiman, Karl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Nelson, Ardis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 68 - 1 | ACK | 15 Dec, 2005 |
| 68 - 2 | WIL | 15 Dec, 2005 |
| 68 - 3 | SMA | 15 Dec, 2005 |

Newman, Roberta E.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 17 Jan, 2006 |
| F2 - 2 | SMA | 17 Jan, 2006 |
| F2 - 3 | SMA | 17 Jan, 2006 |
| F2 - 4 | VIS | 17 Jan, 2006 |
| F2 - 5 | NEP | 17 Jan, 2006 |
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |

Newton, Peter

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Nilsson, Gregory

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 87 - 1 | ACK | 29 Dec, 2005 |
| 87 - 2 | SMA | 29 Dec, 2005 |
| 87 - 3 | CEF | 29 Dec, 2005 |
| 87 - 4 | OHV | 29 Dec, 2005 |

Nilsson, Gregory

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 87 - 5 | OHV | 29 Dec, 2005 |
| 87 - 6 | WIL | 29 Dec, 2005 |
| 87 - 7 | EFM | 29 Dec, 2005 |
| 87 - 8 | OHV | 29 Dec, 2005 |
| 87 - 9 | OHV | 29 Dec, 2005 |
| 87 - 10 | ACK | 29 Dec, 2005 |
| 87 - 11 | NEP | 29 Dec, 2005 |

Nissl, Jan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

O**Oberg, Pamela**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Obuckley, Todd

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Obudzinski, Dirk

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Olnas, Juli

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Olsen, Susan

Alaska Resource Advisory Council

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 85 - 1 | ACK | 29 Dec, 2005 |
| 85 - 2 | SMA | 29 Dec, 2005 |
| 85 - 3 | SMA | 29 Dec, 2005 |
| 85 - 4 | ACK | 29 Dec, 2005 |
| 85 - 5 | SMA | 29 Dec, 2005 |
| 85 - 6 | SMA | 29 Dec, 2005 |
| 85 - 7 | NEP | 29 Dec, 2005 |
| 85 - 8 | REC | 29 Dec, 2005 |
| 85 - 9 | OHV | 29 Dec, 2005 |
| 85 - 10 | OHV | 29 Dec, 2005 |
| 85 - 11 | ACK | 29 Dec, 2005 |
| 85 - 12 | OHV | 29 Dec, 2005 |
| 85 - 13 | EFM | 29 Dec, 2005 |
| 85 - 14 | OHV | 29 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Olson, Drake

ECA, Inc.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 82 - 1 | ACK | 28 Dec, 2005 |
| 82 - 2 | SMA | 28 Dec, 2005 |

Oseman, Nance

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Osterberg, Nils

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |

O'sullivan, Joseph

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

P**Pan, Pinky Jain**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |

Pan, Pinky Jain

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Patch, Frances

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Patrello, S.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Pattantyus, Nik

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Pavitt, Bridget

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |

Pavitt, Bridget

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Pedersen, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Pederson, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Perlman, Frances

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Perry, Mary-ellen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Pethers, Katrina

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Phillips, Janice

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Picciotti, Melanie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Plato, Barry

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Ploeg, Johan F.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Pollock, Jeri

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Poulson, Judi

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 18 Dec, 2005 |
| F1 - 2 | SMA | 18 Dec, 2005 |
| F1 - 3 | ACK | 18 Dec, 2005 |
| F1 - 4 | SMA | 18 Dec, 2005 |
| F1 - 5 | ACK | 18 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Prang, Tom

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 79 - 1 | NEP | 28 Dec, 2005 |
| 79 - 2 | ACK | 28 Dec, 2005 |

Prang, Tom

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 79 - 3 | OHV | 28 Dec, 2005 |
| 79 - 4 | LAR | 28 Dec, 2005 |
| 79 - 5 | SMA | 28 Dec, 2005 |
| 79 - 6 | EFM | 28 Dec, 2005 |
| 79 - 7 | CEF | 28 Dec, 2005 |
| 79 - 8 | DOI | 28 Dec, 2005 |
| 79 - 9 | ACK | 28 Dec, 2005 |
| 79 - 10 | SMA | 28 Dec, 2005 |
| 79 - 11 | ACK | 28 Dec, 2005 |

Pratt, Don

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Premllall, Anandi

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |

Prosperie, Johnnie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Q**Quaas, Agnes**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 4 - 1 | ACK | 08 Dec, 2005 |
| 4 - 2 | OHV | 08 Dec, 2005 |
| 4 - 3 | WIL | 08 Dec, 2005 |
| 4 - 4 | ACK | 08 Dec, 2005 |
| 4 - 5 | ACK | 08 Dec, 2005 |
| 4 - 6 | ACK | 08 Dec, 2005 |
| 5 - 1 | ACK | 08 Dec, 2005 |
| 5 - 2 | SOC | 08 Dec, 2005 |
| 5 - 3 | HAZ | 08 Dec, 2005 |
| 5 - 4 | ACK | 08 Dec, 2005 |
| 32 - 1 | ACK | 28 Dec, 2005 |
| 32 - 2 | OHV | 28 Dec, 2005 |
| 32 - 3 | HAZ | 28 Dec, 2005 |
| 32 - 4 | EFM | 28 Dec, 2005 |
| 32 - 5 | VEG | 28 Dec, 2005 |
| 32 - 6 | NEP | 28 Dec, 2005 |
| 32 - 7 | ACK | 28 Dec, 2005 |

Quire, Mark

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |

R**Rae, Erika**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |

Ramos, Miguel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |

Ramos, Miguel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Reede, Tim

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Rehn, Debra

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Reichgott, Christine B.

Environmental Protection Agency

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 42 - 1 | ACK | 29 Dec, 2005 |
| 42 - 2 | ACK | 29 Dec, 2005 |
| 42 - 3 | ACK | 29 Dec, 2005 |
| 42 - 4 | ACK | 29 Dec, 2005 |
| 42 - 5 | ACK | 29 Dec, 2005 |
| 42 - 6 | NEP | 29 Dec, 2005 |
| 42 - 7 | ACK | 29 Dec, 2005 |
| 42 - 8 | ACK | 29 Dec, 2005 |
| 42 - 9 | SMA | 29 Dec, 2005 |
| 42 - 10 | MAP | 29 Dec, 2005 |

Reichgott, Christine B.

Environmental Protection Agency

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 42 - 11 | NEP | 29 Dec, 2005 |
| 42 - 12 | SMA | 29 Dec, 2005 |
| 42 - 13 | SMA | 29 Dec, 2005 |
| 42 - 14 | OHV | 29 Dec, 2005 |
| 42 - 15 | SMA | 29 Dec, 2005 |
| 42 - 16 | ROP | 29 Dec, 2005 |
| 42 - 17 | EDI | 29 Dec, 2005 |
| 42 - 18 | ACK | 29 Dec, 2005 |
| 42 - 19 | CLI | 29 Dec, 2005 |
| 42 - 20 | CLI | 29 Dec, 2005 |
| 42 - 21 | CLI | 29 Dec, 2005 |
| 42 - 22 | COR | 29 Dec, 2005 |
| 42 - 23 | ACK | 29 Dec, 2005 |
| 42 - 24 | NEP | 29 Dec, 2005 |
| 42 - 25 | ACK | 29 Dec, 2005 |

Reina-rosenbaum, Rose

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Rhoads, Kirk

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Riley, Kelly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Ringe, Axel C.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Riolo, Marion

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Robinson, James

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 18 - 1 | ACK | 13 Dec, 2005 |
| 18 - 2 | SMA | 13 Dec, 2005 |
| 18 - 3 | SMA | 13 Dec, 2005 |
| 18 - 4 | OHV | 13 Dec, 2005 |
| 18 - 5 | SMA | 13 Dec, 2005 |
| 18 - 6 | NEP | 13 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |

Robinson, James

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Rodrigue, Jim

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Romans, Jennifer

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Root, Charlene

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Rosales, Lisa

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Rosenkrantz, Stewart

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Rothstein, Lori

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Rozelle, Shanna

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Rusch, Denyce

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |

Rusch, Denyce

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Rush, Charlene

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Russell, Matthew

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 13 Dec, 2005 |
| F1 - 2 | SMA | 13 Dec, 2005 |
| F1 - 3 | ACK | 13 Dec, 2005 |
| F1 - 4 | SMA | 13 Dec, 2005 |
| F1 - 5 | ACK | 13 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Rymer, Carlos

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 19 Jan, 2006 |
| F2 - 2 | SMA | 19 Jan, 2006 |
| F2 - 3 | SMA | 19 Jan, 2006 |
| F2 - 4 | VIS | 19 Jan, 2006 |

Rymer, Carlos

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 5 | NEP | 19 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

S**Sachau, B.**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 57 - 1 | ACK | 30 Sep, 2005 |

Saecker, John

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Sanchez, A.j.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Sanders, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |

Sanders, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Santerre, Roger

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Sayago, Maria Sara

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 23 Jan, 2006 |
| F2 - 2 | SMA | 23 Jan, 2006 |
| F2 - 3 | SMA | 23 Jan, 2006 |
| F2 - 4 | VIS | 23 Jan, 2006 |
| F2 - 5 | NEP | 23 Jan, 2006 |
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Schlacter, Judith

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Schwartz, Sally

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Schwartz, Sally

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Schwarz, Charles

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 18 Dec, 2005 |
| F1 - 2 | SMA | 18 Dec, 2005 |
| F1 - 3 | ACK | 18 Dec, 2005 |
| F1 - 4 | SMA | 18 Dec, 2005 |
| F1 - 5 | ACK | 18 Dec, 2005 |

Scott, Stephanie K.

Haines Borough Assembly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 26 - 1 | SMA | 27 Dec, 2005 |
| 26 - 2 | SOC | 27 Dec, 2005 |
| 26 - 3 | SMA | 27 Dec, 2005 |

Seaman, Richard

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Seth, Barry

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |

Seth, Barry

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Sexton, Mike

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Shadrick, Roxann

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Shalat, Harriet

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Sheldon, Burl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 84 - 1 | NEP | 29 Dec, 2005 |
| 84 - 2 | ACK | 29 Dec, 2005 |
| 84 - 3 | WIL | 29 Dec, 2005 |
| 84 - 4 | SMA | 29 Dec, 2005 |
| 84 - 5 | ACK | 29 Dec, 2005 |
| 84 - 6 | SMA | 29 Dec, 2005 |

Sheldon, Burl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Shelton, Mary

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Sherzer, Harry

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Shively, Daniel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |

Shohan, Doug

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Shook, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Shook, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Shukla, H.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Silver, Ronald H.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Simmons, Barre

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |

Simmons, Barre

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 15 Dec, 2005 |

Simon, Philip

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Singer, Barbara

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Smilyanov, Dimitar

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Smith, Norman L.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 92 - 1 | SMA | 30 Dec, 2005 |
| 92 - 2 | SMA | 30 Dec, 2005 |
| 92 - 3 | ACK | 30 Dec, 2005 |
| 92 - 4 | SMA | 30 Dec, 2005 |
| 92 - 5 | ACK | 30 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |

Smith, Norman L.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 23 Dec, 2005 |
| F1 - 2 | SMA | 23 Dec, 2005 |
| F1 - 3 | ACK | 23 Dec, 2005 |
| F1 - 4 | SMA | 23 Dec, 2005 |
| F1 - 5 | ACK | 23 Dec, 2005 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Snead, Phyllis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Souza, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |

Souza, Michael

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Spotts, Richard

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Stahl, Charlotte

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Starr, Julie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Stauffer, Sybil

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Stauffer, Sybil

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Stepanski, Dusty

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Sternberg, Lewis

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

Strader, Dow

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Strebeck, Robert

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |
| F1 - 1 | ACK | 17 Dec, 2005 |
| F1 - 2 | SMA | 17 Dec, 2005 |
| F1 - 3 | ACK | 17 Dec, 2005 |
| F1 - 4 | SMA | 17 Dec, 2005 |
| F1 - 5 | ACK | 17 Dec, 2005 |

Street, Griffin

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |

Sulanke, Thom

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 29 Dec, 2005 |
| F1 - 2 | SMA | 29 Dec, 2005 |
| F1 - 3 | ACK | 29 Dec, 2005 |
| F1 - 4 | SMA | 29 Dec, 2005 |
| F1 - 5 | ACK | 29 Dec, 2005 |

Sullivan, Kate

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |

Sundberg, Scott

| Southeast Alaska Backcountry Adventure | | |
|--|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 80 - 1 | ACC | |
| 80 - 2 | LAR | |

Sundberg, Scott

| Southeast Alaska Backcountry Adventure | | |
|--|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 80 - 3 | ACK | |
| 80 - 4 | SMA | |
| 80 - 5 | SMA | |
| 80 - 6 | SMA | |
| 80 - 7 | ACK | |
| 80 - 8 | ACK | |
| 80 - 9 | REC | |
| 80 - 10 | REC | |
| 80 - 11 | REC | |

Swanson, Scott

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Sweel, Greg

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

T**Taygan, Will**

| Knik Group, Alaska Chapter Sierra Club | | |
|--|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 11 - 1 | ACK | 14 Dec, 2005 |

Taygan, Will

| Knik Group, Alaska Chapter Sierra Club | | |
|--|--------------|---------------------|
| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
| 11 - 2 | LAR | 14 Dec, 2005 |
| 11 - 3 | ACK | 14 Dec, 2005 |
| 11 - 4 | OHV | 14 Dec, 2005 |
| 54 - 1 | ACK | |
| 54 - 2 | ACK | |
| 54 - 3 | SMA | |
| 54 - 4 | SMA | |
| 54 - 5 | VIS | |
| 54 - 6 | SMA | |
| 54 - 7 | ACK | |
| 54 - 8 | OHV | |
| 54 - 9 | OHV | |
| 110 - 1 | ACK | 30 Jan, 2006 |
| 110 - 2 | SMA | 30 Jan, 2006 |
| 110 - 3 | WSR | 30 Jan, 2006 |
| 110 - 4 | SMA | 30 Jan, 2006 |
| 110 - 5 | VIS | 30 Jan, 2006 |
| 110 - 6 | SMA | 30 Jan, 2006 |
| 110 - 7 | SMA | 30 Jan, 2006 |
| 110 - 8 | OHV | 30 Jan, 2006 |

Taylor, George

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 21 - 1 | ACK | 07 Dec, 2005 |
| 21 - 2 | NEP | 07 Dec, 2005 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |
| F1 - 1 | ACK | 19 Dec, 2005 |
| F1 - 2 | SMA | 19 Dec, 2005 |
| F1 - 3 | ACK | 19 Dec, 2005 |
| F1 - 4 | SMA | 19 Dec, 2005 |
| F1 - 5 | ACK | 19 Dec, 2005 |
| F1 - 1 | ACK | 24 Dec, 2005 |
| F1 - 2 | SMA | 24 Dec, 2005 |
| F1 - 3 | ACK | 24 Dec, 2005 |
| F1 - 4 | SMA | 24 Dec, 2005 |
| F1 - 5 | ACK | 24 Dec, 2005 |

Thompson, Cheryl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Thompson, Cheryl

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |

Thomson, Arran

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Thornley, Emily

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Thu, Eric

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Thurmond, Roberta

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Tildes, Katherine

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Tostenson, Kimberly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Trepes, Karen

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 24 Dec, 2005 |
| F1 - 2 | SMA | 24 Dec, 2005 |
| F1 - 3 | ACK | 24 Dec, 2005 |
| F1 - 4 | SMA | 24 Dec, 2005 |
| F1 - 5 | ACK | 24 Dec, 2005 |

Tribble, David

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |
| F2 - 5 | NEP | 12 Jan, 2006 |

Triplett, Tia

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Turek, Gabriella

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

U**Uhde, Eric**

Alaska Center for the Environment

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 12 - 1 | ACK | 14 Dec, 2005 |
| 12 - 2 | ACK | 14 Dec, 2005 |
| 12 - 3 | SMA | 14 Dec, 2005 |
| 12 - 4 | OHV | 14 Dec, 2005 |
| 12 - 5 | ACK | 14 Dec, 2005 |

Uhde, Eric

Alaska Center for the Environment

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 12 - 6 | COR | 14 Dec, 2005 |
| 12 - 7 | SMA | 14 Dec, 2005 |

Updike, Kelley

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Urani, Thomas

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

V**Vertrees, Gerald**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Vesely, Sak

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Vincent, Judith

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Virgin, Randy

Alaska Center for the Environment

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 98 - 1 | SMA | 29 Dec, 2005 |
| 98 - 2 | SMA | 29 Dec, 2005 |
| 98 - 3 | SMA | 29 Dec, 2005 |

Vogt, Deborah

Haines Borough Assembly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 74 - 1 | ACK | 27 Dec, 2005 |
| 74 - 2 | SMA | 27 Dec, 2005 |
| 74 - 3 | REC | 27 Dec, 2005 |
| 74 - 4 | SMA | 27 Dec, 2005 |
| 74 - 5 | SMA | 27 Dec, 2005 |

| Comment# | | Issue | Submitted On |
|----------|-----|-------|--------------|
| F1 - 1 | ACK | | 07 Dec, 2005 |
| F1 - 2 | SMA | | 07 Dec, 2005 |
| F1 - 3 | ACK | | 07 Dec, 2005 |
| F1 - 4 | SMA | | 07 Dec, 2005 |
| F1 - 5 | ACK | | 07 Dec, 2005 |
| F1 - 1 | ACK | | 14 Dec, 2005 |
| F1 - 2 | SMA | | 14 Dec, 2005 |
| F1 - 3 | ACK | | 14 Dec, 2005 |
| F1 - 4 | SMA | | 14 Dec, 2005 |
| F1 - 5 | ACK | | 14 Dec, 2005 |
| F2 - 1 | ACK | | 12 Jan, 2006 |
| F2 - 2 | SMA | | 12 Jan, 2006 |
| F2 - 3 | SMA | | 12 Jan, 2006 |
| F2 - 4 | VIS | | 12 Jan, 2006 |
| F2 - 5 | NEP | | 12 Jan, 2006 |

Wacker, William

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| 83 - 1 | SMA | 28 Dec, 2005 |
| 83 - 2 | SMA | 28 Dec, 2005 |
| 83 - 3 | REC | 28 Dec, 2005 |
| 83 - 4 | SMA | 28 Dec, 2005 |
| 83 - 5 | ACK | 28 Dec, 2005 |

NAV DINI AA NA (CHICKALOON VILI)

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| 35 - 1 | ACK | 23 Jan, 2006 |
| 35 - 2 | SMA | 23 Jan, 2006 |
| 35 - 3 | AKN | 23 Jan, 2006 |
| 35 - 4 | ACK | 23 Jan, 2006 |
| 35 - 5 | NEP | 23 Jan, 2006 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

| Comment#Issue | Submitted On |
|---------------|--------------|
|---------------|--------------|

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 14 Jan, 2006 |
| F2 - 2 | SMA | 14 Jan, 2006 |
| F2 - 3 | SMA | 14 Jan, 2006 |
| F2 - 4 | VIS | 14 Jan, 2006 |
| F2 - 5 | NEP | 14 Jan, 2006 |

| Comment# | | Issue | Submitted On |
|----------|-----|-------|--------------|
| F1 - 1 | ACK | | 07 Dec, 2005 |
| F1 - 2 | SMA | | 07 Dec, 2005 |
| F1 - 3 | ACK | | 07 Dec, 2005 |
| F1 - 4 | SMA | | 07 Dec, 2005 |
| F1 - 5 | ACK | | 07 Dec, 2005 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 17 Dec, 2005 |
| F1 - 2 | SMA | 17 Dec, 2005 |
| F1 - 3 | ACK | 17 Dec, 2005 |
| F1 - 4 | SMA | 17 Dec, 2005 |
| F1 - 5 | ACK | 17 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| 15 - 1 | ACK | 17 Nov, 2005 |
| 55 - 1 | ACK | 30 Jan, 2006 |
| 55 - 2 | SMA | 30 Jan, 2006 |
| 55 - 3 | ACK | 30 Jan, 2006 |
| 55 - 4 | ACK | 30 Jan, 2006 |
| 55 - 5 | SMA | 30 Jan, 2006 |

| Comment# | | Issue | Submitted On |
|----------|-----|-------|--------------|
| F1 - 1 | ACK | | 07 Dec, 2005 |
| F1 - 2 | SMA | | 07 Dec, 2005 |
| F1 - 3 | ACK | | 07 Dec, 2005 |
| F1 - 4 | SMA | | 07 Dec, 2005 |
| F1 - 5 | ACK | | 07 Dec, 2005 |
| F1 - 1 | ACK | | 12 Jan, 2006 |
| F1 - 2 | SMA | | 12 Jan, 2006 |
| F1 - 3 | ACK | | 12 Jan, 2006 |
| F1 - 4 | SMA | | 12 Jan, 2006 |
| F1 - 5 | ACK | | 12 Jan, 2006 |

| Friends of Mat-Su | | |
|-------------------|-------|--------------|
| Comment# | Issue | Submitted On |
| 23 - 1 | ACK | 19 Dec, 2005 |
| 23 - 2 | MAP | 19 Dec, 2005 |
| 23 - 3 | COR | 19 Dec, 2005 |
| 23 - 4 | ACK | 19 Dec, 2005 |

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F2 - 5 | NEP | 13 Jan, 2006 |

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

| Comment# | Issue | Submitted On |
|----------|-------|--------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

| Comment#Issue | | Submitted On |
|---------------|-----|--------------|
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec. 2005 |

Wiley, Carol

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Williams, Paul

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Williams-west, Jeanie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Wilmore, Seth

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Wilson, Jennifer

Department of Transportation & Public

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 49 - 1 | ACK | 16 Nov, 2005 |
| F2 - 1 | ACK | 15 Jan, 2006 |
| F2 - 2 | SMA | 15 Jan, 2006 |

Wilson, Jennifer

Department of Transportation & Public

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 3 | SMA | 15 Jan, 2006 |
| F2 - 4 | VIS | 15 Jan, 2006 |
| F2 - 5 | NEP | 15 Jan, 2006 |
| F1 - 1 | ACK | 11 Dec, 2005 |
| F1 - 2 | SMA | 11 Dec, 2005 |
| F1 - 3 | ACK | 11 Dec, 2005 |
| F1 - 4 | SMA | 11 Dec, 2005 |
| F1 - 5 | ACK | 11 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 27 Dec, 2005 |
| F1 - 2 | SMA | 27 Dec, 2005 |
| F1 - 3 | ACK | 27 Dec, 2005 |
| F1 - 4 | SMA | 27 Dec, 2005 |
| F1 - 5 | ACK | 27 Dec, 2005 |

Woerpel, D.v.m., Richard W.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 20 Dec, 2005 |
| F1 - 2 | SMA | 20 Dec, 2005 |
| F1 - 3 | ACK | 20 Dec, 2005 |
| F1 - 4 | SMA | 20 Dec, 2005 |
| F1 - 5 | ACK | 20 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Wold, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 22 Dec, 2005 |
| F1 - 2 | SMA | 22 Dec, 2005 |
| F1 - 3 | ACK | 22 Dec, 2005 |
| F1 - 4 | SMA | 22 Dec, 2005 |
| F1 - 5 | ACK | 22 Dec, 2005 |
| F2 - 1 | ACK | 12 Jan, 2006 |
| F2 - 2 | SMA | 12 Jan, 2006 |
| F2 - 3 | SMA | 12 Jan, 2006 |
| F2 - 4 | VIS | 12 Jan, 2006 |

Wold, Amy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 5 | NEP | 12 Jan, 2006 |

Wolf, Susan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Wood, Margaret

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 52 - 1 | ACK | 07 Dec, 2005 |
| 52 - 2 | ACK | 07 Dec, 2005 |
| 52 - 3 | SMA | 07 Dec, 2005 |
| 52 - 4 | ACK | 07 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Woods, Jean

Matanuska Valley Sportsman

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 2 - 1 | ACK | 08 Dec, 2005 |
| 37 - 1 | COR | 28 Dec, 2005 |
| 37 - 2 | ACK | 28 Dec, 2005 |
| 37 - 3 | EFM | 28 Dec, 2005 |
| 50 - 1 | ACK | 08 Dec, 2005 |
| 50 - 2 | SMA | 08 Dec, 2005 |
| 50 - 3 | ACK | 08 Dec, 2005 |
| 50 - 4 | SMA | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |

Ring of Fire Proposed RMP/Final EIS

Woods, Jean

Matanuska Valley Sportsman

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 5 | ACK | 14 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Woomer, Joanna

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 25 Dec, 2005 |
| F1 - 2 | SMA | 25 Dec, 2005 |
| F1 - 3 | ACK | 25 Dec, 2005 |
| F1 - 4 | SMA | 25 Dec, 2005 |
| F1 - 5 | ACK | 25 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Wright, Heather

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| 108 - 1 | NEP | 18 Jan, 2006 |
| 108 - 2 | SMA | 18 Jan, 2006 |
| 108 - 3 | SMA | 18 Jan, 2006 |
| 108 - 4 | SMA | 18 Jan, 2006 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |

Wyer, D.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Wyer, D.

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Wyse, Frank

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 14 Dec, 2005 |
| F1 - 2 | SMA | 14 Dec, 2005 |
| F1 - 3 | ACK | 14 Dec, 2005 |
| F1 - 4 | SMA | 14 Dec, 2005 |
| F1 - 5 | ACK | 14 Dec, 2005 |

X**X, Paula**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Y**Yakel, Michelle**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Yates, Joan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Yates, Joan

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Young, Jane

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F2 - 1 | ACK | 16 Jan, 2006 |
| F2 - 2 | SMA | 16 Jan, 2006 |
| F2 - 3 | SMA | 16 Jan, 2006 |
| F2 - 4 | VIS | 16 Jan, 2006 |
| F2 - 5 | NEP | 16 Jan, 2006 |
| F1 - 1 | ACK | 12 Dec, 2005 |
| F1 - 2 | SMA | 12 Dec, 2005 |
| F1 - 3 | ACK | 12 Dec, 2005 |
| F1 - 4 | SMA | 12 Dec, 2005 |
| F1 - 5 | ACK | 12 Dec, 2005 |

Yung, Jackie

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |

Yurkiw, Dorothy

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 15 Dec, 2005 |
| F1 - 2 | SMA | 15 Dec, 2005 |
| F1 - 3 | ACK | 15 Dec, 2005 |
| F1 - 4 | SMA | 15 Dec, 2005 |
| F1 - 5 | ACK | 15 Dec, 2005 |

Z**Zajic, Daniel**

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
|-----------------|--------------|---------------------|

Zajic, Daniel

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F1 - 1 | ACK | 08 Dec, 2005 |
| F1 - 2 | SMA | 08 Dec, 2005 |
| F1 - 3 | ACK | 08 Dec, 2005 |
| F1 - 4 | SMA | 08 Dec, 2005 |
| F1 - 5 | ACK | 08 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

Zalewski, Kimberly

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 10 Dec, 2005 |
| F1 - 2 | SMA | 10 Dec, 2005 |
| F1 - 3 | ACK | 10 Dec, 2005 |
| F1 - 4 | SMA | 10 Dec, 2005 |
| F1 - 5 | ACK | 10 Dec, 2005 |
| F1 - 1 | ACK | 12 Jan, 2006 |
| F1 - 2 | SMA | 12 Jan, 2006 |
| F1 - 3 | ACK | 12 Jan, 2006 |
| F1 - 4 | SMA | 12 Jan, 2006 |
| F1 - 5 | ACK | 12 Jan, 2006 |

Zeinstra, Juanita

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 09 Dec, 2005 |
| F1 - 2 | SMA | 09 Dec, 2005 |
| F1 - 3 | ACK | 09 Dec, 2005 |
| F1 - 4 | SMA | 09 Dec, 2005 |
| F1 - 5 | ACK | 09 Dec, 2005 |

Zimny, Gloria

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 1 | ACK | 07 Dec, 2005 |
| F1 - 2 | SMA | 07 Dec, 2005 |

Zimny, Gloria

| <i>Comment#</i> | <i>Issue</i> | <i>Submitted On</i> |
|-----------------|--------------|---------------------|
| F1 - 3 | ACK | 07 Dec, 2005 |
| F1 - 4 | SMA | 07 Dec, 2005 |
| F1 - 5 | ACK | 07 Dec, 2005 |
| F2 - 1 | ACK | 13 Jan, 2006 |
| F2 - 2 | SMA | 13 Jan, 2006 |
| F2 - 3 | SMA | 13 Jan, 2006 |
| F2 - 4 | VIS | 13 Jan, 2006 |
| F2 - 5 | NEP | 13 Jan, 2006 |

ATTACHMENT B

FORM LETTER RESPONSE INDEX

Form #1

| <u>Comment #</u> | <u>Comment Text:</u> | <u>Response</u> | <u>Issue(s):</u> |
|------------------|---|--|------------------|
| 1 | I am writing to comment on the Draft Ring of Fire Resource Management Plan. As someone who is very concerned with protecting our country's wild public lands, I was pleased to learn that the BLM's preferred alternative, Alternative D, adopts many of the excellent conservation-minded concepts proposed in the Conservation Alternative, C. | | ACK |
| 2 | I urge the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wild rivers, wilderness-quality landscapes, sensitive wildlife habitat, and other natural resources. | Although Alternative C is not BLM's Proposed Action, Alternative D would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, designate BLM-managed lands in the Knik River and Haines Block as Special Recreation Management Areas, and would delineate travel management for off-highway vehicle use as "Limited". | SMA |
| 3 | I was pleased to learn about the proposed 229,000-acre Neacola Mountains and Blockade Glacier Area of Critical Environmental Concern, such a short distance from Anchorage. Protection of these incredible scenic resources and recreation opportunities for the enjoyment of future generations is absolutely necessary today. | | ACK |
| 4 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | BLM recognizes the varied recreation opportunities that the Knik River Valley has to offer, and has assigned the "limited" OHV classification to the area. We intend to further define the management of the Knik River SRMA through the development of an implementation plan, which will incorporate the goals (Appendix F) for the SRMA. BLM is committed to working with all of the interested parties as part of its planning process. BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets, and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for the Knik River SRMA, determine that there are areas which should be managed to allow additional OHV use. | SMA |
| 5 | I urge the BLM to adopt and implement these conservation measures as part of its final resource management plan for Alaska's Ring of Fire area. | | ACK |

Form #2

| <u>Comment #</u> | <u>Comment Text:</u> | <u>Response</u> | <u>Issue(s):</u> |
|------------------|--|--|------------------|
| 1 | I am writing to comment on the Draft Ring of Fire Resource Management Plan. | | ACK |
| 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | The Proposed Action (D) would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, but the Chilligan River tract would not be included in the ACEC. The boundaries of the Neacola Mountains ACEC are based on our analysis of the scenic and other resource values of the area. Other areas were considered but not included in the ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable laws. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. | SMA |
| 3 | I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 2 under Form Letter #2. Also, please reference the ACEC decision matrix in Section 2.2. | SMA |
| 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | The Proposed Action (D) would designate the Neacola Mountains as an ACEC with a VRM Class of II. | VIS |
| 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | Under NEPA (40 CFR 1500-1506), BLM is required to make the Draft RMP/EIS and supporting documents available to the public, agencies, and Native entities for review, with appropriate time for interested parties to provide comments. BLM saw it necessary to extend the comment period in order to provide a thorough review of the Draft RMP/EIS revisions. BLM appreciates your participation in the review process and comment period. | NEP |

ATTACHMENT C
RESPONSE INDEX

Access/Travel Management

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 24 - 13 | While transportation and access was considered, but not further analyzed in the study, future development of BLM properties should identify suitable ground transportation and access. Efficient transportation systems can be accomplished by ensuring interconnected roads and adequate road design to accommodate emergency vehicles and equipment. | The Proposed RMP/Final EIS does not identify specific transportation corridors due to the fragmented land ownership and the uncertainty of future land transfers. As land transfers are completed and future planning activities occur, transportation and access would be re-evaluated. |
| 31 - 2 | We wish to retain motorized access to the public lands in the Knik River Valley in case of future land transfers to Native Corporations. | ANILCA allows for "appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulation." BLM also has the responsibility under ANCSA 17(b) to identify and reserve appropriate public access across private lands to access public lands. |
| 31 - 3 | We think it is entirely appropriate to include 17b easements through those potential upcoming land transfers as was done by the BLM in other areas of Alaska including the Butte area such as the Burnt Butte Trail and the RS 2477 right of Way Trail (RS17) to the Knik Glacier. The 17b easements will assure access to the public lands beyond the private land areas. The existing RS17 trail Right-of-Way, as designated by the State of Alaska, passes through the proposed land transfers near Wolf Point. | The process identifying, considering, and reserving ANCSA Sec. 17(b) easements is a required element of land transfer. Currently there is no RS 2477 assertion for RS 17. |
| 41 - 10 | 2. Include Effective transportation provisions -Broad latitude must be included to allow new transportation infrastructure to be developed in the most feasible ways possible. The need is to establish a straight-forward predictable process to develop future infrastructure. We do not know exactly where all of the mineral and energy resources are located so we cannot predict where and what type of transportation infrastructure will be needed. The need, therefore, is to implement an infrastructure planning process that will readily accommodate future resource discoveries and allow infrastructure to be reasonably developed. | Please see response to comment 24-13 under Access/Travel Management. |

Access/Travel Management

| Comment # | Comment | Response |
|-----------|---|--|
| 80 - 1 | <p>Access</p> <p>I believe that the preferred alternative D will limit access to these very remote primitive region in which OHV and other means of transportation are not available.</p> | <p>The preferred decision for all areas within this plan is to delineate travel management for off-highway vehicle use as "Limited". This delineation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001). Implementation of Limited use area designations for OHVs would be effective immediately after signature of the decision record. BLM's goal is to manage and maintain a diversity of recreation opportunities. A key to managing for a primitive recreation experience is the management of motorized use. By taking the management direction indicated in Alternative D (the Preferred Alternative), BLM sets the stage to proactively manage to maintain a range of recreation experiences, particularly on lands managed long-term by the BLM. In some cases this can be done in a non-regulatory fashion by controlling un-managed proliferation of motorized trails. In other cases, particularly where use trends are increasing, some regulation may be required.</p> |
| 119 - 93 | <p>The Draft RMP/EIS did not adequately assess the issue of managing existing or future ANCSA § 17(b) public easements. We request that the Final RMP/EIS propose a coordinated strategy to locate, identify and proactively manage ANCSA § 17(b) easements, as established by the BLM Section 17(b) Public Easement Program. This includes prioritizing enforcement. We agree with the criteria and goals put forth in the BLM Resource Advisory Committee Resolution of February 18, 1999.</p> <p>BLM also should address any public easements that were not completed in its 2001 review of all public easements ANCSA § 17(b) easement cases, if any exist.</p> | <p>The Draft RMP/EIS states "realignment of 17(b) easements would be considered with the cooperation of the land owner on lands already conveyed." Where documented resource damage is occurring, BLM will, in consultation and cooperation with the land owner, State and other federal agencies and the public, consider re-location of the 17(b) easement or maintenance of selected areas, based on priorities. These actions are discretionary and will be contingent on funding approval. Please see response to comment 31-3 under Access/Travel Management.</p> |
| 119 - 94 | <p>The Final RMP/EIS should address the impacts of the State navigable waters issue as a method of accessing public lands. The Draft RMP/EIS does not adequately assess this issue.</p> | <p>Nothing in the Proposed RMP/Final EIS affects lands that are not managed by BLM. The State of Alaska has the final say on the river's use.</p> |

End of section on Access/Travel Management

Alaska Natives

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 20 - 5 | <p>The document states that the BLM will maintain contact with appropriate Native tribal governments. In the Haines-Skagway area of Southeast Alaska the BLM should include:</p> <ol style="list-style-type: none"> 1. Chilkat Indian Village 2. Chilkoot Indian Association 3. Skaqua Traditional Council 4. Tlingit-Haida Central Council | Thank you, comment acknowledged. |
| 35 - 3 | We are happy to comment on this issue and look forward to continuing our Government to Government relationship in the future. | Thank you, comment acknowledged. |
| 119 - 11 | <p>We commend BLM on its March 2005 decision to establish new procedures to clarify its management responsibility to proactively work with local, state and tribal governments as cooperating agencies during the preparation of planning documents and environmental impact statements (43 CFR Part 1600). These procedures will ensure broader local public participation in federal resource management decisions and ultimately result in more effective on-the-ground, cooperative solutions among adjacent land managers. Throughout the Ring of Fire RMP/EIS public process, we have been reassured by the helpful assistance of the Anchorage Field Office planning staff. We also appreciate the numerous public meetings that BLM has held in local communities and with organizations affected by BLM's proposals in the Draft RMP/EIS. The government-to-government relationships between BLM and the federally recognized Tribes of the region were an essential and appreciated component of the public process. We hope that BLM Alaska's future RMP processes adopt a similar approach to the government-to-government relations.</p> | Please see response to comment 6-2 under NEPA Compliance. BLM will continue to consult with Tribes during implementation of the plan. |

End of section on Alaska Natives

Alternatives

| Comment # | Comment | Response |
|-----------|--|--|
| 7 - 8 | The next comment is on the Palmer Hay Flats. The no surface occupancy and limited seasonal restrictions in Alternative C, I think, should be a preferred alternative for the Palmer Hay Flats BLM lands due to waterfowl and migratory bird habitats. | Future actions are subject to the application of the ROPs and/or stipulations as appropriate, and will also go through the NEPA process which may develop mitigation measures related to the potential impacts of the activity being considered. Seasonal restrictions on lands open to fluid mineral leasing for the Palmer Hay Flats are contained in the Proposed Action, Alternative D. |
| 34 - 4 | 1) Mountain Goat Monitoring and Control Area (M&C Area) The DEIS states that "Alternative A represents the continuation of current management practices." See DEIS at 2-3. The M&C Area was created in 2002, and BLM has managed it as a M&C Area ever since. Therefore, Alternative A should be changed to reflect the fact that the M&C Area is a continuation of current management practices. Since no developments are anticipated for the M&C Area under Alternative B, Alternative B should also include the M&C Area, as would Alternatives C and D, as proposed in the DEIS. | BLM has not designated the M&C Area as a Special Management Area, but created the M&C Area in 2002 for the purpose of data analysis as part of its mountain goat study in the Haines area. Continuance of the M&C Area is contingent on the determination that BLM will continue to study the mountain goat population, which will be a consideration during the development of the implementation-level plan for the Haines area. |
| 34 - 19 | An ACEC/RNA designation would satisfy the requirement for resolving the helicopter/goat issue by providing truly different management scenarios. In 2004, LCC proposed two Special Management Areas (SMA): a management area north of the existing M&C Area to accommodate increasing levels of helicopter supported recreation, and an ACEC/RNA elsewhere to protect goats and wildlife from impacts of increasing levels of helicopter-supported recreation. In an effort to satisfy the requirements of planning process step 5, we now propose the following: That Alternative C, the conservation alternative, place all Haines Block lands in an ACEC, with the current M&C Area and lands adjacent to Glacier Bay to be managed as an RNA. That Alternative D, a balance between use and protection, contain the following two special management areas - a SRMA to be managed for recreational uses, and an ACEC/RNA to protect Haines' identified outstanding wildlife resources. The ACEC/RNA for Alternative D would include the existing M&C Area and lands adjacent to Glacier Bay National Park. The SRMA would include lands north of the M&C Area. This new proposal creates a range of alternatives that resolve the major planning issue while emphasizing different management scenarios. Alternatives A and B would be as proposed in the DEIS (after modification to correct the DEIS error of omitting the existing M&C Area), Alternative C would provide a conservation alternative, and Alternative D would be a viable balance between resource development and conservation. This approach also complies with BLM's mandate that alternatives address and/or resolve the identified planning issue in different ways. See Handbook at 21. | Please see responses to comments 26-1 and 26-3 under Special Management Areas. It is at the implementation level of planning that distinct alternatives for the management of the Haines Block SRMA will be presented to the public for comment. |

Alternatives

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 34 - 30 | Consider all reasonable alternatives as mandated by NEPA. See Handbook at 20. Given the rigors outlined in the planning process, the ACEC/RNA is a reasonable alternative and must be considered. | Please see response to comment 26-3 under Special Management Areas. |
| 73 - 2 | As I understand it, Alternative C prohibits oil and gas exploration activity or road building on the Palmer Hay Flats from March 15 to June 1, and from September 1 to October 31, as well as No Surface Occupancy to protect waterfowl habitat for migratory birds. I am writing because I would like to see this language included in Alternative D as well (I understand this to be the preferred Alternative). | See response to comment 7-8 under Alternatives. |
| 73 - 5 | Please add No Surface Occupancy for Palmer Hay Flats and protection from oil and gas development and road building to Alternative D. | See response to comment 7-8 under Alternatives. |
| 119 - 3 | With the understanding that a great deal of community involvement, hard work, and interagency coordination went into this process, we do not find the current preferred alternative to strike a balance between conservation of the resources and development within the planning area. | While the Proposed Action would increase the amount of land available for development when compared to Alternative A or C, we believe that Alternative D balances conservation with development. One ACEC and two SRMAs will be established, and all BLM-managed land will be classified as "limited" to OHV use. Two small parcels and the ACEC will be managed for VRM II. Development, where allowed, will be subject to the ROPs and stipulations in Appendix D which are the minimum guidelines that will be used to ensure that resource impacts will be mitigated, on a site-specific basis, during the NEPA process associated with the Plan of Operations review and approval. Additionally, commercial activities will be subject to permitting and consultation requirements under the Clean Water Act, Clean Air Act, Migratory Bird Treaty Act, and other local, State, and federal requirements. |

Alternatives

| Comment # | Comment | Response |
|-----------|--|---|
| 119 - 70 | <p>Recommended Visual Resource Management Classes</p> <p>VRM Class I</p> <p>-Neacola Mountains ACEC, especially the Blockade Glacier tract.</p> <p>VRM Class II</p> <p>-Portions of the Neacola Mountains ACEC, including the Chilligan River tract.</p> <p>-Haines Area SRMA</p> <p>All other BLM-managed lands should be managed to uphold the objectives of VRM Classes II and III in order to retain and preserve the existing undeveloped characteristics of the visual resources.</p> | <p>Please see responses to comments 13-4 and 119-67 under Visual Resources.</p> |
| 119 - 91 | <p>Thus, BLM should maintain the ANCSA § 17 (d) (1) withdrawals in the following areas until similar, appropriate protective measures are instituted:</p> <ol style="list-style-type: none"> 1. The unencumbered BLM lands within the proposed Neacola Mountains ACEC to conserve the pristine nature of the outstanding scenic, wildlife and recreation values. 2. Areas of traditional subsistence activity, and cultural or historical importance, including such unsurveyed locations as, Chilligan River, Iniskin River, Kirschner Lake, McArthur River, Nagishlamina River, Takhin River, Tsirku River, Buskin River, Elbow Creek, Kashwitna River, King's River, Ship Creek, and other areas where there may be moderate to high potential for cultural resource findings due to historic human habitation associated with these anadromous streams, significant waterbodies, and travel corridors. 3. The fourteen rivers identified as eligible Wild & Scenic Rivers for the protection and preservation of their ORVs. 4. The 273,000 acres within the proposed Haines Area SRMA for the protection of the visual resources and wildlife habitat upon which the local tourism industry depends. According to Mr. Lloyd's presentation at public meetings, BLM expects to likely retain permanent ownership of these Haines area lands because there is currently little or no identified State priority for their conveyance. We recommend that BLM also maintain the ANCSA § 17 (d)(1) withdrawals on the proposed Haines Area SRMA lands in the event that the State relinquishes its selections. 5. All lands assigned VRM Class I and II. | <p>In those areas where the temporary withdrawal of public lands provided by Section 17(d)(1) of ANCSA has fulfilled its purpose of resolving potential land status conflicts, it is appropriate to revoke the withdrawal and manage the lands according to multiple use concepts consistent with the resource values present. It is important to note that for the majority of the planning area the lifting of these withdrawals will have little or no effect on disposition of those lands because the lands have been selected by either the State or by an ANCSA corporation, and BLM is limited in committing use of those lands until selection status is resolved.</p> |

Alternatives

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 114 | <p>Lands recognized as containing outstanding resource values should not be considered for leasable or locatable mineral entry. The following areas should be closed to leasing, exploration, and development:</p> <ul style="list-style-type: none"> - All portions of eligible Wild and Scenic River corridors ; - All lands within the proposed Neacola Mountains ACEC, and the proposed Haines Area SRMA/RNA; - The Palmer Hay Flats parcels; - Lands within 400 feet of anadromous rivers and streams; - Lands assigned VRM Class I and II throughout the planning area; - Critical brown bear habitat along the Iniskin River; - Lands on the Alaska Peninsula, especially those near or adjacent to Steller's Eider and Steller Sea Lion critical habitat; - Critical moose winter range; areas within ¼ mile of historically active bald eagle and osprey nest sites; lands adjacent to communities and residential areas. | <p>BLM is a multiple-use agency and as such, is tasked with considering a variety of proposals on public lands. Site-specific mitigation can be accomplished through the application of the NEPA process and through the assignment of ROPs and stipulations (Appendix D), as appropriate to the location and proposal. No locatable mineral development will occur without a Plan of Operations, which contain site-specific ROPs and stipulations, as well as abiding by all federal and state laws and regulations. Mineral activities will be monitored using existing BLM 3809 regulations. Under the Proposed Action, no WSR corridors were recommended as suitable for designation. However, the values of the 14 eligible river segments will be taken into consideration when BLM considers future permit applications in those areas. BLM manages public lands for multiple uses in accordance with the Federal Land Policy and Management Act (FLPMA). Land use decisions are made that protect the resources while allowing different uses of those resources, such as energy development, and recreation. Where there are conflicts between resource uses, or where a land use activity may result in unacceptable or irreversible impacts to the environment, BLM may restrict or prohibit some land uses in specific areas. These are areas where it has been determined that other land uses or resource values cannot be adequately protected, and appropriate protection can be ensured only by closing the land to leasing through either statutory or administrative requirements. While some of these areas contain resources that may warrant special considerations, they will be managed through mitigation measures developed through the NEPA process, and the application and enforcement of stipulations and ROPs. Additionally, BLM considers the management strategies of neighboring land owners and, when determined appropriate, will incorporate those strategies into its management.</p> |

End of section on Alternatives

Cumulative Effects

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 16 - 4 | Evaluation of impacts on BLM lands also needs to include flight corridors utilized in accessing BLM lands. Permitted landings on BLM land have impacts on non-BLM lands. | <p>The cumulative effects analyses presented in Section 4.4 of the Proposed RMP/Final EIS considers all past, present, and reasonably foreseeable future actions, including overflights, to determine potential impacts from BLM management alternatives. Also, BLM considers impacts to neighboring lands, including impacts to their associated resources and uses, when permitting landings on BLM lands.</p> <p>BLM has acknowledged disturbances created by helicopters and has addressed these by establishing horizontal and vertical distance restrictions as wildlife protective measures in critical areas. BLM also has administrative authority over the permitting of landing locations on its lands. Flight paths or corridors are not within BLM's area of authority. However, as part of the permitting process, the permittee is required to adhere to the standards and regulations of other agencies.</p> |
| 79 - 7 | I would strongly suggest that the limited commercial and economic benefits from helicopter use are negated by the visual, social, auditory, and wildlife impacts. | Thank you, comment acknowledged. |
| 87 - 3 | Much damage has occurred for the past 25 years on these lands. We have noticed considerable increase (up to 3,000 recreationists on a sunny weekend) of people visiting the area. The cumulative damage to habitat, fish, wildlife and quality of life for residents is widely known. | BLM shares your concern regarding intensive recreation use in the Knik River area. Refer to comment 22-13 under Recreation regarding development of implementation plans for this area. |
| 119 - 33 | Finally, the Draft RMP/EIS failed to analyze the direct, indirect, and cumulative impacts of recommending rivers as suitable or un-suitable for designation, as required by NEPA. We request that BLM amend the draft plan to include an analysis of the specific impacts of designation or non-designation of each eligible river segment upon recreation opportunities, fisheries, wildlife, historic and cultural values, local economies, subsistence, scientific and educational opportunities, and all other significant impacts. | See response to comment 113-3 under Wild and Scenic Rivers. |

Cumulative Effects

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 116 | BLM cumulative impacts analysis for Leasable and Locatable Minerals was similarly flawed. Its analysis of the cumulative impacts of mineral development under each of the four alternatives lacked any identification or analysis of the environmental impacts of the projected increased mineral entry and subsequent mineral exploration and development. Instead, BLM's analysis focused on the "cumulative impacts to oil and gas resources" rather than on the cumulative impacts to the environment. This stands NEPA on its head. | <p>See response to comment 119-99 under Leasable Minerals.</p> <p>Past, present, and reasonably foreseeable mineral developments are considered in the impact analyses for each resource. Section 4.4.4.2 does address the impacts to leasable minerals. However, cumulative impacts from all mineral activities are addressed by resource program in Section 4.4.3 (Resources section). The analysis is structured so that effects FROM potential mineral entry ON other resources are discussed under that particular affected resource (e.g., wetlands). Chapter 4 and the ROPs and stipulations (Appendix D) were written for the protection of sensitive resources on BLM lands.</p> <p>The Fluid Leasable Minerals objective (Section 2.3.2.1) states that all fluid minerals actions will comply with goals, objectives, and resource restrictions (mitigations) to protect other resource values on BLM-managed lands within the planning area. Environmental impacts for leasable and locatable minerals were discussed in the preceding sections by resource. There is no need to restate them if the consequences are the same across all alternatives. No locatable mineral development will occur without a Plan of Operations, which contain site-specific ROPs and stipulations, as well as abiding by all federal and State laws and regulations. Mineral activities will be monitored using existing BLM 3809 regulations.</p> <p><i>End of section on Cumulative Effects</i></p> |

Climate Change

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 25 | 2.5.3 Wildland Fire and Fuels, page 2-34 through 36. We question whether it is reasonable to expect that BLM can maintain key ecosystem components intact and functioning "within their historical range" given our understanding of changes in climate. (page 2-35) | Thank you, comment acknowledged. Climate change may cause changes to vegetative communities that are beyond the control of BLM. BLM will respond to changes in management conditions as deemed necessary. Please also see response to comment 42-19 under Climate Change. |
| 42 - 19 | While land use changes are drivers of environmental and climatic changes, climate changes can, in turn, affect land cover and land use. The BLM has the opportunity during their RMP process to develop innovative and effective resource management strategies that recognize and identify changes to land cover due to climate change, which could influence land use and resource development options. | The BLM recognizes the importance of climate change and the potential impacts it may have on the natural environment. BLM land use management practices are based on goals and objectives that are established for different geographical areas. These established land uses are based on numerous criteria, including land cover and historical land uses. If climate change continues to have an effect on BLM-managed resources and programs, or use changes in a management area, BLM will re-evaluate the land management status for that given area and adjust management accordingly. |
| 42 - 20 | We acknowledge that the interaction between land use and climate change is complex and not fully understood at this time. However, we recommend the BLM recognize the need for land management strategies that anticipate and monitor for changes in land cover potentially due to climate change, and that consider potential changes to climate due to land use decisions and resource development. | See response to comment 42-19 under Climate Change. |
| 42 - 21 | Opportunities to document baseline environmental conditions and monitor for climate change indicators such as glacier cover, wildlife migration patterns and permafrost depths may exist on BLM-managed areas within the Ring of Fire planning area. | See response to comment 42-19 under Climate Change. |

Climate Change

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 119 - 132 | Global climate change threatens to dramatically impact the Ring of Fire planning area during the life span of the Draft RMP/EIS. Thus, BLM should have provided more information on how the agency plans to implement policies tailored to the expected changes. In particular, we encourage BLM to specify how expected changes to permafrost will be incorporated into transportation corridor planning, OHV use, and oil, gas and mineral extraction. This should include expected impacts to water quality from oil, gas and mineral leasing as the permafrost melts and the impacts on wildlife from leasing as migration patterns change. We also encourage BLM to proactively look at how changes to wildlife patterns will affect subsistence use in this area. BLM should address these issues in the Final RMP/EIS. | Thank you, comment acknowledged. Please see Section 3.2.1, and the analyses of cumulative effects located in Chapter 4. |

End of section on Climate Change

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 12 - 6 | Our worries are that the Alaska Department of Natural Resources will be unable to keep these unmanaged activities and damage associated with such activities to solely State land. Surely the effects will be observed on the BLM land if the planning process is not started. | Both ADNRR and BLM must deploy limited enforcement resources judiciously. By coordinating where possible, the enforcement capacity can be maximized to prevent adverse impacts to Federal or State managed lands. |
| 16 - 7 | Apply science from Yellowstone and other federal lands to Ring of Fire. | Thank you, comment acknowledged. |
| 17 - 5 | Further, AQRC is concerned that should pending state legislation to create a Knik River Public Use Area be enacted, BLM will conform its management to it. | Thank you, comment acknowledged. Under the Proposed Action, BLM will develop management measures for the Knik River SRMA through an implementation level plan, coordinated with, but not subservient to, State management approaches. |
| 17 - 8 | Finally, AQRC believes tying the designation of "limited" to the state's policy set forth in "Generally Allowed Uses" in the proposed special management areas is misguided. The policy contains a huge loophole by allowing the phrase "whenever possible" to modify the requirement that OHVs must remain on existing roads and trails. This loophole precludes any and all enforcement since it is the user who interprets when it is possible, or not, to stay on the road or trail. | Disagree. Under BLM's use of the "limited" designation, during the development of implementation-level plans (Special Recreation Management Plan for the Knik River), BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for the area, determine that there are areas which should be managed to allow additional OHV use. |
| 17 - 10 | AQRC believes adoption of the state's policy unnecessarily ties BLM's enforcement actions during the period of time between the ROD, approving the Plan, and the completion of the implementation planning in the special management areas. This could be along period of time since the Plan states that the priority for implementation planning will be the unencumbered lands in the ACEC. During this time, for example, what enforcement action can BLM take on its 80,000 acres in the Knik River SRMA under the state's policy? | BLM recognizes the conditions which currently exist in the Knik River area, including potential risks to the area's resources and public safety. BLM intends to pursue the increased management of this area on a collaborative basis with Law Enforcement staff and the surrounding land owners as an interim management measure. |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 22 - 20 | Finally (though I have only touched the surface of concerns); it will be impossible for BLM to implement reasonable goals in the watershed should the Huggins/Stoltze bills (HB307, SB 197) become law without a complete makeover. There is no 'wall' between the two properties and the special interest legislation has extreme shortcomings. Please view the attached legal analysis of the bills to understand the weight of this claim. | Your legal concerns with the proposed State Knik River Public Use Area are acknowledged, however BLM has no authority to impose a different management regime on the adjacent state lands. BLM recognizes the non-motorized use of the Knik area and has assigned the "limited" OHV classification to BLM-managed lands in the area. We intend to further define the management of the Knik area through the development of an implementation plan, which incorporates the goals (stated in Appendix F) for the Knik River SRMA. BLM is committed to working with all of the interested parties as part of its planning process. |
| 22 - 21 | Planning discussions/interaction with state officials and agencies seem to be an essential component of effective management. | Agree. Consultation will continue, along lines described in Chapter 5 of the PRMP/FEIS. |
| 23 - 3 | <p>The Matanuska-Susitna Borough adopted regulations (MSB Chapter 17.62) in October 2004 that requires a conditional use permit for any exploration and development of coalbed methane within the borough. This is separate from Federal and State regulations.</p> <p>The conditional use permit consists of two separate permits: a permit for exploration and a permit for development and production of cbm. Each permit requires a separate application, public notice, public hearing and approval by the MSB Planning Commission.</p> <p>Construction, installation and operation of coalbed methane facilities may not begin until the Planning Commission has approved the permits.</p> <p>At some point, BLM lands within the boundaries of the MSB will be open for oil & gas and coalbed methane lease and we want to be sure all parties involved, including operators within a lease, are aware of MSB regulations pertaining to this type of development.</p> | Thank you, comment acknowledged. Chapter 2, Section 2.3.2.2 addresses development of fluid leasables. The MSB regulations will be added to the plan and it will be noted these activities must be permitted by MSB prior to any activity. However, it is the ultimate responsibility of lessors and operators to comply with local regulations outside the jurisdiction of BLM responsibilities. |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 24 - 4 | Alternative D (the preferred alternative) allows for potential increased levels of resource development and extraction. The Matanuska-Susitna Borough regulates gravel extraction operations and coal bed methane exploration and development (MSB Interim Materials District & MSB 17.62); these MSB regulations should be referenced in the plan and it should be noted these activities must be permitted by the MSB prior to any exploration or development activities. | See response to comment 23-3 under Coordination and Compatibility. |
| 24 - 6 | Table 1.6-1 of the plan does not include Matanuska-Susitna Borough Plans, such as the Knik-Fairview Comprehensive Plan, Chase Comprehensive Plan, the Talkeetna Comprehensive Plan, the Houston Comprehensive Plan, the Big Lake Comprehensive Plan, the Big Lake Management Plan, the Sutton Comprehensive Plan, the South Denali Plan, or the Matanuska-Susitna Borough Comprehensive Plan. | Thank you. These plans have been added to Table 1.6-1. |
| 24 - 7 | Many communities within the Ring of Fire planning area are currently preparing comprehensive plans, such as Trapper Creek and the Y community. | Thank you, comment acknowledged. |
| 24 - 8 | In addition, Talkeetna, Nancy Lake State Recreation Area, Palmer Hay Flats Recreation Area, Denali State Park, Point MacKenzie Port, and the City of Houston also have Special Land Use Districts (See MSB Chapter 17) that regulate land uses within those areas. | Thank you, comment acknowledged. |
| 24 - 9 | Please note that the Knik-Fairview Planning Area is developing a Special Land Use District for a proposed Sled Dog & Recreation District as outlined in the Knik-Fairview Comprehensive Plan. | Thank you, comment acknowledged. |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 24 - 10 | While the Telecommunications Act of 1996 and the Executive Memorandum of 1996 and the Executive Memorandum of August 10, 1995 requires BLM to facilitate requests for communication sites, please note that the Matanuska-Susitna Borough regulates cell towers and such facilities require a conditional use permit (See MSB 17.69.140). Borough regulations are also being developed for other essential services and utilities. | BLM will cooperate with the Borough to insure that proponents are aware of the Borough's requirements. |
| 24 - 12 | The Matanuska-Susitna Borough fully supports working collaboratively with BLM and other interested agencies in actively pursuing planning development and enforcement strategies for the Knik River Area. | Thank you for your comment. BLM is committed to working with all interested parties as part of the planning process. |
| 25 - 3 | Permits to cross streams should be kept in place through the Department of Natural Resources as they are written now. There is no biological reason to close streams to crossings within the public use area. Data from the Alaska Department of Fish and Game, reveals that there is no damage to salmon populations in the Knik River drainage. | Thank you, comment acknowledged. However, the preferred alternative recommends a Special Recreation Management Area, for which more specific management measures would be developed through an implementation level plan. This plan must, according to BLM's policy, be developed with the involvement of the surrounding land owners and managers and will take into consideration all of the available resource data. As noted in Table 2.3-4 of the PRMP/FEIS, this may involve measures such as seasonal closures, closure of some portion of the SMA to OHVs, designation of trails or limitations to designated trails, and/or opening some portions of the SRMA to OHV use. |
| 25 - 4 | Regulations on federal lands that separate state lands should coincide with state regulations. Lands that are currently federal lands and selected by the state and or private corporations should remain in either the state or federal ownership. Privatization would only create elimination for users of these lands unless agreed upon by owners and users. | Coordinated and consistent management among neighboring land jurisdictions strengthens management and reduces confusion. BLM is obliged to convey lands consistent with the entitlements of the State and Native corporations. BLM attempts to be as consistent with the management of the surrounding lands in its plans. Nothing in this plan will affect BLM's obligation to satisfy these entitlements and transfer of title to the State or Native corporations. |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 27 - 7 | <p>Additionally, we request that BLM adopt strong protective measures for the Neacola Mountains/Chilligan River Area of Critical Environmental Concern (ACEC). This area is adjacent to both state and federally protected lands (the Trading Bay State Game Refuge and Lake Clark National Park). As we are well aware, migratory wildlife do not recognize land ownership boundaries so it is only logical that the BLM should apply conservative wildlife management provisions to the Neacola Mountains ACEC that are consistent and complimentary to those of the National Park Service and State Game Refuge.</p> | <p>Thank you, comment acknowledged. The Proposed Action would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC. The boundaries of the Neacola ACEC are based on our analysis of the scenic and other resource values of the area. Other areas were considered but not included in the proposed ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies, and any future actions will be subject to the NEPA process and the ROPs and stipulations developed for BLM lands.</p> |
| 28 - 12 | <p>WHEREAS, Palmer Hay Flats State Game Refuge lands have been designated as critical habitat for Alaska's wildlife;</p> <p>WHEREAS, Palmer Hay Flats State Game Refuge lands have been legislatively set aside as a public recreation area for all Alaskans;</p> | <p>Please see response to comment 28-1 under Special Management Areas.</p> |
| 33 - 2 | <p>We recognize the difficulty inherent in developing a land use decision-making document designed to provide overall guidance in an area where land status is in flux due to unresolved State and Native land selections. We appreciate BLM's efforts to coordinate with the State throughout the planning process. Through consistent, close coordination with the State, many potential issues have been eliminated or resolved during development of this plan.</p> | <p>Thank you for the comment. BLM seeks to minimize the potential for significant differences or changes in management approaches on selected lands, pending completion of the conveyance process.</p> |
| 33 - 3 | <p>Furthermore, BLM's efforts to coordinate proposed management strategies with those on adjacent state lands as described in state planning documents will help to create predictable management schemes for the public now, and following conveyance of selected lands.</p> | <p>Thank you, comment acknowledged. BLM seeks to minimize the potential for significant changes in management approaches of selected lands, pending completion of the conveyance process.</p> |
| 33 - 70 | <p>We appreciate the attention BLM has paid to existing State planning documents, regulations, and previously articulated concerns as well as the level of cooperation and coordination extended to the State.</p> | <p>Thank you for the comment. Under the Secretary's 4 "C"s guidance, BLM seeks to maximize cooperation, consultation, and coordination.</p> |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 36 - 4 | Regardless of designation, we recommend that BLM parcels adjacent to existing state or federal conservation units be managed in a manner consistent with the management of the adjacent unit. The Palmer Hay Flats units are adjacent to the Palmer Hay Flats State Game Refuge and the Iniskin River Valley is adjacent to Lake Clark National Park and Wilderness Area. | BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. |
| 37 - 1 | In the Knik please have the same rules as the state as there is no way to tell where BLM land starts and ends. | Agree with premise that coordinated, consistent management strengthens effectiveness and reduced confusion. However, BLM would have to independently develop management measures through the public process of an activity plan, coordinating closely with State managers, but guided by BLM mandates and procedures. |
| 42 - 22 | The BLM may also have opportunities to collaborate and coordinate with other agencies and with educational institutions to conduct research and monitoring of climate change on BLM-managed land within the planning area. | BLM welcomes the opportunity to leverage scarce monitoring funds through cooperative projects. |
| 47 - 3 | I am pleased that BLM recognizes the importance of working with the community in developing management plans that will preserve recreation while, very importantly, ensuring resource protection. Everyone will benefit by this approach. | Thank you, comment acknowledged. |
| 119 - 23 | At a minimum, we recommend that BLM apply to the proposed Neacola Mountains ACEC management principles consistent with the adjacent Lake Clark National Park and Preserve. | Please see response to comment 36-4 under Coordination and Compatibility. |

Coordination and Compatibility

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 119 - 89 | We request that the Anchorage Field Office follow the example set in the Draft East Alaska RMP/EIS which proposed including selected lands within special management areas should the selections be relinquished and the lands ultimately retained in federal ownership. For example, BLM proposed this management scheme for the “eligible” South Branch of the West Fork of the Gulkana River and the Tiekkel SRMA. Likewise, the proposed Neacola Mountains ACEC should include within its boundaries the adjacent block of State-selected lands along the McArthur River. This strategy would provide consistent management and prevent future enforcement problems. For example, if the State’s Generally Allowed Uses are the standard for OHV use on BLM interim-managed lands, it will be difficult for recreational OHV users to adhere to the more restrictive federal guidelines should the State relinquish its selections. | See response to comment 53-2 in Special Management Areas. |

End of section on Coordination and Compatibility

Cultural Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 43 - 17 | The Chilkoot is also an important archaeological site, being ancestral land of one local Native group and perhaps others in the past. Basic archaeological assessment was done here in 2003 with much more in-depth work yet to be done. | BLM recognizes the important cultural significance of the Chilkoot River and surrounding lands. As noted in Section 3.2.16.5 in the Proposed RMP/Final EIS, "there are approximately 4,800 cultural resource sites in the southeast region." Although not identified by location or name, culturally significant sites along the Chilkoot River are included in the count. |

End of section on Cultural Resources

DOI/BLM Compliance

| Comment # | Comment | Response |
|-----------|--|--|
| 33 - 8 | We request that BLM include information about the Alaska Coastal Zone Management Act of 1997 and the Alaska Coastal Management Program in the plan so that land managers as they undertake specific implementation activities are aware that certain federal actions may require a Federal Coastal Consistency Determination. Chapter 2, Section 2.0, page 2-3 may be an appropriate location for this discussion since this federal requirement will pertain to all alternatives. Attachment B contains language excerpted from other Federal land use plans that may be useful. | BLM has an obligation to coordinate applications with the State under ANILCA Section 906(k). Part of this is the coordination of applications for Coastal Zone Consistency review. |
| 34 - 10 | Because the DEIS identifies the major Haines Block planning issue as impacts of helicopter-supported recreation to goats and other wildlife, it is essential that BLM analyze the ten years of goat monitoring data gathered from the Haines Block prior to making land use planning decisions that may negatively affect an identified significant wildlife resource. Wildlife specialists acknowledge that increasing levels of helicopter-supported recreation in goat habitat "can result in a variety of negative effects, including habitat abandonment significant enough to affect population status and herd viability, dramatic changes in seasonal habitat use, increased vulnerability to predation, alarm response, decreased bouts of foraging and resting, increased animal movement and energy expenditure, and reduced productivity." See 2004 Northern Wild Sheep and Goat Council ("NWSGC") Position Statement. This professional organization of wildlife biologists, researchers and veterinarians based its Statement on "the best available knowledge." Id. However, this "best available knowledge" is contradicted by the DEIS conclusion that there would be "continued minimal adverse effects from recreation activities" on goat populations. See DEIS at 4-148. That is, negative effects that decrease herd viability can hardly be termed "minimal". It is inappropriate for the DEIS to make that conclusion before analyzing the very data that would determine whether or not this is indeed the case. BLM is required to "document sufficient analysis to support all conclusions." See BLM Land Use Planning Handbook H-1601-1 ("Handbook") Appendix F at 17. There is no documented basis for this conclusion of "minimal adverse effects," particularly when "the best available knowledge" indicates this conclusion is erroneous. | <p>Please see responses to comments 34-11 under DOI/BLM Compliance and 119-57 under Wildlife.</p> <p>Text in Section 4.4.3.4.3 has been changed to indicate that "there would be continued adverse effects of a currently unspecified magnitude from recreation activities."</p> |

DOI/BLM Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 34 - 11 | <p>The importance of having good data is recognized in the Handbook: "The BLM must analyze available inventory data and other information." See Handbook at 19. This information is used as "the basis for formulating reasonable alternatives." Id at 20. Without this information BLM planners have no idea whether all goat populations are healthy, or whether there are differences between populations in the M&C Area and populations that receive varying levels of helicopter disturbance within the Haines Block. Once compiled, this data would help articulate the "physical and biological processes that affect ecosystem function. . .and the relative value and scarcity of the resources," as mandated in the BLM handbook. See Handbook at 20. That is, decision-makers would learn about the relative health of goat populations under various levels of helicopter intrusion, and various seasonal habitat use patterns. Inferences could be made about the health of known goat predators such as black and brown bear, wolverine and bald eagles. The effectiveness and adequacy of current mitigation requirements could also be determined.</p> | <p>BLM agrees with the stated comments. The mountain goat inventory data is being analyzed along with other available information, and will be utilized in the preparation of the Haines Block SRMA implementation plan. When compiled and analyzed, the assessment will be made available as a published report.</p> |
| 34 - 12 | <p>Additionally this data would not only supply the critical missing information about the current status of goat populations, but also could be used to predict changes in goat and goat predator resources should the current management continue, as required by the Handbook. See Handbook Appendix F at 8. In fact, "a successful land use planning effort always employs rigorous standards for maintaining, managing, and applying data and derived information. Standardized, accurate, and reliable data and information are critical to the development of plan assessments, alternatives, impact analysis, and planning decisions." See Handbook Appendix G at 1.</p> | <p>Please see responses to comments 34-10 and 34-27 under DOI/BLM Compliance.</p> |

DOI/BLM Compliance

| Comment # | Comment | Response |
|-----------|---|---|
| 34 - 27 | <p>"Consider the relative scarcity of the values involved." Id. We made the case in our 2004 ACEC/RNA nomination that the majority of naturally occurring mountain goats on BLM lands nationwide are located in the Haines Block. See LCC 2004 nomination. This scarce BLM resource is put at risk by helicopter-supported recreation. See 2004 ADFG scoping comments and NWSGC Position Statement.</p> | <p>BLM does consider the relative scarcity of resources in an area. This is one of the reasons for the proposed Haines Block SRMA (Figure 2.3-4 and Appendix F of the Proposed RMP/Final EIS). While an ACEC/RNA designation would have some protection function, it is not a viable option at this time. However, a SRMA designation and associated future implementation planning as proposed in the Proposed RMP/Final EIS, would beneficially affect mountain goat populations in the area.</p> <p>BLM considered the nomination of the Haines Block as an ACEC and the remaining lands as an RNA but did not assign those designations in the Draft RMP/EIS. The lands in the Haines Block containing Special Recreation Permits are being designated as a Special Recreation management Area. The subsequent implementation plan for the area will address the effected resources, including mountain goats. Large portions of the lands surrounding Haines have been selected by the State of Alaska and appear on their priority list for 2006. Title to these lands will be transferred by BLM. Although BLM has gathered data over a 11 year period, there are no proposals to study the resources by anyone outside the BLM.</p> |
| 45 - 4 | <p>Further, we understand from LCC that it is their belief that BLM's policies and regulations require BLM to make public such requests as part of the planning process and we trust BLM will now provide a means for the public to comment on LCC's ACEC proposal.</p> | <p>This ACEC proposal was not brought forward in the Draft RMP/EIS planning process (see Chapter 2, Section 2.2). The public will have an opportunity to comment on ACECs or SRMAs that are designated as a result of this PRMP/FEIS during the implementation level planning phase.</p> |
| 79 - 8 | <p>I have personally witnessed the impacts of a few unethical tour operators on natural and cultural resources. Until the business community can comply with a set of systematic and ethical guidelines, it is wise to limit the locations and types of such activities.</p> | <p>Thank you, comment acknowledged.</p> |

DOI/BLM Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 113 - 18 | Unfortunately, we are concerned that a de facto suitability analysis has already been completed since Alternatives A, B and D completely fail to account for the possibility that some or all of the eligible Wild and Scenic rivers would ultimately be determined suitable. The Draft RMP even fails to list interim protection measures that would be taken under these Alternatives. Such a de facto decision defies the intent of BLM Manual 8351, which clearly lays out a process for the careful and fully informed analysis of suitability through the planning NEPA process. | Please see response to comment 113-3 under Wild and Scenic Rivers. |
| 119 - 5 | This planning process is an opportunity for BLM to fulfill its duty of responsible land stewardship by establishing management goals and desired future natural resource conditions above and beyond maintaining the status quo. | Thank you, comment acknowledged. |
| 119 - 24 | In this Draft RMP/EIS, BLM's analysis of the eligibility of rivers and river segments in the planning area for Wild and Scenic designation was inadequate. As discussed below, its analysis flouted its legal mandates pursuant to the Wild and Scenic Rivers Act (WSRA) and NEPA. It also ignored internal agency guidance on conducting WSRA evaluations. Thus, we request that BLM prepare a Revised Draft RMP/EIS that address the various omissions and inconsistencies discussed herein so that the public will have an opportunity to review and comment on this information before a Final RMP/EIS is issued. | BLM disagrees with this comment. Please review the text in Section 2.2 in the Proposed RMP/Final EIS, Alternatives Considered But Not Further Analyzed, as well as the response to comments 113-3 under Wild and Scenic Rivers. |
| 119 - 28 | Moreover, pursuant to NEPA, the Interagency Guidelines, and Appendix C of BLM's Land Use Planning Handbook, BLM must include, and fully analyze, a reasonable range of alternatives for the use of these river areas. The Draft RMP/EIS improperly proposed three alternatives that failed to recommend a single river for designation and recommended fourteen rivers in the remaining alternative. To provide a reasonable range of alternatives, BLM must propose alternatives that range from designating all eligible rivers to designating no river, and in the other alternatives propose designations in a range somewhere between these two extremes. | Please see responses to comments 113-3 and 113-20 under Wild and Scenic Rivers. |

DOI/BLM Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 119 - 30 | BLM Manual 8351 sets forth thirteen suitability criteria. In direct contravention of this guidance, for each of the fourteen rivers recommended in Alternative C, BLM provided no discussion of (a) the reasonably foreseeable potential uses of the land and related potential uses of the land which would be enhanced or foreclosed by designation; (b) the degree to which State or local governments might participate in the preservation and administration of the river; (c) public support or opposition to designation under the WSRA; (d) the estimated cost to the United States of designation and administration, or any of the other criteria the Manual requires. Thus, BLM must issue a Revised Draft RMP/EIS that includes discussion of all of the suitability criteria for each eligible river. | Relevant suitability criteria and the rivers that are considered eligible in this planning process are discussed in Section 3.4.1.3. |
| 119 - 55 | According to the BLM Land Use Planning Handbook (LUP Handbook), "The BLM must analyze available inventory data and other information." See LUP Handbook at 19. BLM is to use this information to provide "the basis for formulating reasonable alternatives." Id. at 20. | See response to 34-11 under DOI/BLM Compliance. |
| 119 - 101 | The Final RMP/EIS also must clarify and provide a detailed explanation of how the BLM may tier off the document for future decisionmaking on resource development or other activities that may damage resources or resource values. | A complete NEPA analysis is required for all proposed projects within the Ring of Fire planning area. |
| 119 - 119 | BLM also should clarify two other assertions it made in the Draft RMP/EIS. BLM stated that it will continue to "provide detailed mineral assessment of specific areas." BLM should provide a citation for the source of its authority to conduct such an assessment. | ANILCA Section 1010, Alaska Mineral Resource Assessment Act (P.L. 96-487, 16 U.S.C. 3150) provides the authority for these assessments. |
| 119 - 127 | BLM should wait for Congress to revise the 1872 General Mining Law before proceeding with opening public lands to mineral entry. In the meantime, BLM should identify area-wide terms, conditions, and special considerations that would protect natural resource values. | As part of the planning process required by BLM, we have to look and deal with the issues that confront us today, not what may or may not happen in the future. The rules that BLM are required to follow for Locatable Minerals are the 1872 General Mining Laws and 3809 regulations. |

End of section on DOI/BLM Compliance

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 14 | <p>1.2 Description of Planning Area</p> <p>We suggest adding a clarifying statement following "Because of over selection, BLM will ultimately retain management of some of the selected lands." However, nothing in this plan will encumber state or native selected lands prior to conveyance</p> | <p>The following text has been added to Section 1.2, page 1-1 of the Proposed RMP/Final EIS: "However, nothing in this plan will encumber State- or Native-selected lands following transfer of the title out of Federal ownership."</p> |
| 33 - 15 | <p>1.3.2 Issues Considered But Not Further Analyzed, Page 1-6, Consider wilderness designations.</p> <p>Please edit the last sentence to read as follows:</p> <p>"In accordance with all of the above, wilderness inventory is not being conducted as part of this planning effort and wilderness areas designations are not considered in any of the alternatives."</p> | <p>The last sentence on page 1-6 in Section 1.3.2 of the PRMP/FEIS has been edited to read, "In accordance with all of the above, wilderness inventory is not being conducted as part of this planning effort, and wilderness areas designations are not considered in any of the alternatives."</p> |
| 33 - 16 | <p>We suggest that a sentence be included in paragraph 3 of the introductory section on the alternatives on page 2-1 that further explains the tenure of RMP decisions on state and native selected lands. It would be helpful to explain that Special Management Designations neither encumber state or native selected lands, nor do they carry forward following conveyance.</p> | <p>The following text has been added to Section 2.0, page 2-1, paragraph 3 of the Proposed RMP/Final EIS: "Special Management Designations on State- or Native- selected lands do not carry forward following conveyance of the lands."</p> |
| 33 - 17 | <p>2.1.3 Alternative C</p> <p>We suggest modifying the second sentence (page 2-3) as follows: "One ACE and two SRMAs would be established should these lands remain in long term ELM ownership, plans developed for the areas, and specific measures adopted; to protect or enhance values within these areas."</p> | <p>The third sentence in Section 2.1.3, page 2-3 of the Proposed RMP/Final EIS has been modified: "One ACEC and two SRMAs would be established if these lands remain in long-term BLM ownership, plans would be developed for the areas, and specific measures would be adopted to protect or enhance values within these areas."</p> |
| 33 - 18 | <p>2.1.4 Alternative D</p> <p>We suggest modifying the third sentence (page 2-4) as follows: "One ACE and two SRMAs would be established should these lands remain in long term ELM ownership, plans developed for the areas, and specific measures adopted to protect or enhance values within these areas "</p> | <p>The second sentence in Section 2.1.4, page 2-4 of the Proposed RMP/Final EIS has been modified: "One ACEC and two SRMAs would be established if these lands remain in long-term BLM ownership, plans would be developed for the areas, and specific measures would be adopted to protect or enhance values within these areas."</p> |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 33 - 23 | 2.4.1 Fisheries~ Page 2-27, Objectives, 2nd paragraph. For reference, we request the Bureau include a copy of the Master Memorandum of Understanding between the Bureau and the Alaska Department of Fish and Game in the Appendix of the final plan. | A copy of this document is included in the Proposed RMP/Final EIS as Appendix K. |
| 33 - 27 | Please edit the first word in bullet number 5 to read "Suppress..." (page 2-36) | "Suppressed" has been changed to "Suppress" in the Proposed RMP/Final EIS. |
| 33 - 28 | Table 2.7-1 Summary and Comparison of Effects on Resources by Alternative (p. 2-56) Please modify the sentence "Future planning associated with the SMAs or VRM classifications proposed under this alternative could result in additional restrictions for mineral development within those areas" to indicate that future planning will also involve a public comment period. We suggest: "Future planning associated with the SMAs or VRM classifications proposed under this alternative could result in additional restrictions for mineral development within those areas after a period of public review and comment." | "after a period of public review and comment" has been added to this sentence in the Proposed RMP/Final EIS. |
| 33 - 30 | 3.2.8.5 Other Aquatic Habitats Page 3-51 Critical Habitat Areas. We recommend the Bureau separate this section into two parts, State Critical Habitat Areas and National Wildlife Refuges. Both areas are exclusive of one another and have differing statutory and administrative purposes. | An additional subheading, National Wildlife Refuges, has been added to Section 3.2.8.5 of the Proposed RMP/Final EIS. |
| 33 - 31 | Page 3-52, Critical Habitat Areas, 1st full paragraph. Kenai National Wildlife Refuge may have wildlife-dependent recreation as a purpose of the refuge, but all refuges have this purpose under the Refuge Improvement Act of 1997. | Thank you, comment acknowledged. |
| 33 - 32 | Page 3-52, Critical Habitat Areas. We recommend combining the two paragraphs describing Kodiak National Wildlife Refuge into a single paragraph. | This change has been made in Section 3.2.8.5 of the Proposed RMP/Final EIS. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 33 - 33 | Page 3-52, Critical Habitat Areas, last paragraph. Is the 65% of total commercial harvest cited in the text referring to the value of fish or the quantity of fish? | Section 3.2.8.5, page 3-52 of the Proposed RMP/Final EIS has been edited to clarify that the percentage is the quantity, not the value, of fish. |
| 33 - 34 | 3.2.9 Wildlife, Page 3-57, Wildlife, Southeast Region, 4th paragraph, and other similar language elsewhere in the text. We request the Bureau clarify in the text that they manage 12 miles of the Tsirku River uplands, not the actual river itself. | BLM manages the upland portion along 12 miles of the Tsirku River. This clarification has been made in Sections 3.2.4, 3.2.9.1, and 3.2.16.5 of the Proposed RMP/Final EIS. |
| 33 - 35 | 3.3.4 Lands and Realty, Page 3-131, Lands and Realty, 4th bullet (ANILCA) It is more accurate to state that the Alaska National Interest Lands Conservation Act (ANILCA) (1980) established and redesignated National Parks and Preserves, National Wildlife Refuges, National Conservation and Recreation Areas, Wild and Scenic Rivers, National Monuments, and wilderness areas on federal lands in Alaska. | The 4th bullet of Section 3.3.4 in the Proposed RMP/Final EIS has been edited to read, "Alaska National Interest Lands Conservation Act (ANILCA) (1980) established and redesignated National Parks and Preserves, National Wildlife Refuges, National Conservation and Recreation Areas, Wild and Scenic Rivers, National Monuments, and wilderness areas on federal lands in Alaska." |
| 33 - 37 | 3.3.10 Off-Highway Vehicles, page 3-165 Please modify the second sentence in the fourth paragraph to reflect the fact that vehicles in Chugach State Park are allowed on established parking areas and roads as described in 11 AAC 12.020(g.) Vehicle Control. Snow vehicles are allowed on park lands during times when there is adequate snow cover to protect underlying vegetation as described in 11 AAC 20.040 Snow Vehicles. | Where applicable, text throughout the Proposed RMP/Final EIS incorporates the clarification that vehicles in Chugach State Park are allowed on established parking areas and roads as described in 11 AAC 12.020(g), and that snow vehicles are permitted in designated areas when enough snow is on the ground to protect underlying vegetation (11 AAC 20.040). |
| 33 - 38 | 3.3.10.2 Off Highway Vehicle Management Page 3-167, Kodiak Region. There are several inaccuracies in this paragraph describing designated wilderness and off- highway vehicle management on the Kodiak National Wildlife Refuge. We request the Bureau revise this paragraph for the final plan. | The following text is included in Section 3.3.10.2 of the Proposed RMP/Final EIS, replacing the Draft RMP/EIS text for the Kodiak Region: "The majority of Kodiak Island is comprised of the Kodiak NWR (Figure 1.2-2); however, there are small, scattered parcels of BLM land spread throughout the island. Within the refuge boundaries, OHV use is allowed on designated routes or areas by special use permit (USFWS 2004e). This would include OHV use on small parcels of BLM-managed lands that fall within the refuge boundaries. Outside the Kodiak NWR boundaries, the highest potential for OHV use on lands south of the City of Kodiak along the road network." |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 33 - 39 | <p>3.3.11 Recreation.1 Page 3-169.1 6th paragraph (and elsewhere in the document).</p> <p>We request the Bureau revise the text in this paragraph and elsewhere in the document from "sport hunting" to just "hunting." The State subsistence law currently includes all residents as subsistence users in areas where subsistence uses are authorized in State regulation. Federal agencies frequently mischaracterize hunters who are not federally qualified subsistence users to be "sport hunters." Non-federally qualified subsistence users often qualify as subsistence users under the State regulations. It is also important to clarify that State regulations only classify hunters as being "resident" or "non-resident" hunters.</p> | "Sport hunting" has been changed to "hunting" in the Proposed RMP/Final EIS. |
| 33 - 40 | <p>3.4.1.4 Wilderness Study Areas, Page 3-175.</p> <p>We request the Bureau include a citation in this section referring back to page 1-6 of the plan regarding wilderness study proposals.</p> | The following text has been added prior to the last sentence of Section 3.4.1.4 of the Proposed RMP/Final EIS: "Also, as discussed in Section 1.3.2, broad support from elected state and federal officials is required before BLM can consider WSA designations in resource management planning efforts, and the State of Alaska has identified no such support. |
| 33 - 41 | <p>3.5.6 Subsistence.1 Page 3-200, Definitions of Subsistence.</p> <p>We recommend the Bureau move the second sentence in the second paragraph, "State regulations continue to apply statewide to all subsistence activities unless otherwise superseded by federal regulations" to the first paragraph. In its present location, this sentence appears to apply only to subsistence fisheries and is therefore misleading.</p> <p>The third paragraph of this section notes that the statutory definition of subsistence uses incorrectly references the rural priority that no longer exists in state law. The final sentence in this paragraph, "The state does recognize preferential allocation of resource harvest opportunities for rural or non-rural (e.g., sport, subsistence, urban or rural) user groups where uses are allowed," is incorrect. The state regulations do not distinguish between user groups based on their rural or urban residence in Alaska. All Alaska residents qualify as subsistence users in areas of the state where subsistence uses are authorized.</p> | The first three paragraphs of Section 3.5.6.2 in the Proposed RMP/Final EIS have been revised to eliminate confusing text and to present a corrected discussion of the actual state legal framework. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 43 | <p>4.3.1.2.3 Alternatives for Soils, Water Resources.</p> <p>Off Highway Vehicles Effects on Soils and Water Resources, Please see pages 4-14, 15, 17, 19,23,25,27, etc.</p> <p>Scattered throughout Chapter 4 are numerous statements that contain the phrase "...except for the OHV closures at Campbell Tract and on the BLM parcels located within Chugach State Park." Please note that limited OHV use is allowed within Chugach State Park as described in 11 AAC 20.015 and that snow machine use is allowed in certain areas under certain conditions (11 AAC 20.040). Please consider as an alternative: "...except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within Chugach State Park (11 AAC 20..015 and 11 AAC 20.040)." Citations are attached.</p> | <p>Chapter 4, particularly Section 4.3, of the Proposed RMP/Final EIS has been edited to include this change. Applicable text now reads, "...except for the OHV closures at Campbell Tract and restrictions on OHV use on BLM parcels located within Chugach State Park (11 AAC 20.015 and 11 AAC 20.040)."</p> |
| 33 - 44 | <p>4.3.1.4 Fisheries and Aquatic Habitat Page 4-34, Wild and Scenic Rivers Effects on Fisheries and Aquatic Habitat, 2nd paragraph (and elsewhere in the text).</p> <p>It is not accurate to state that Wild Rivers typically do not allow motorized use. In Alaska, the Bureau's management of Wild and Scenic Rivers applies only to uplands and restrictions on public uses are subject to the provisions of the Alaska National Interest Lands Conservation Act (ANILCA) and Interior regulations at 43 CFR Part 36. The State of Alaska manages the rivers. In November 1982, the Alaska Land Use Council approved "A Synopsis for Guiding Management of Wild, Scenic, and Recreational Rivers in Alaska" (attached). We suggest the Bureau revise the sentence to the following:</p> <p>Wild Rivers would allow unobtrusive development and activities consistent with the Department of Interior's 43 CFR Part 36 regulations and the Wild and Scenic River guidelines adopted by the Alaska Land Use Council.</p> | <p>While Wild Rivers generally do not allow motorized use, in Alaska ANILCA provisions would generally allow traditional means of access. The sentence has been revised in the Proposed RMP/Final EIS.</p> |
| 33 - 46 | <p>Page 4-54, Off Highway Vehicles Effects on Vegetation (Alternative D) Please see earlier comments relative to OHV closures in Chugach State Park.</p> | <p>Where applicable, including in Section 4.3.1.6.5, text in the Proposed RMP/Final EIS incorporates the clarification that limited OHV use is permitted in Chugach State Park (11 AAC 20.015), and that snow vehicles are permitted in designated areas when enough snow is on the ground to protect underlying vegetation (11 AAC 20.040).</p> |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 33 - 47 | Page 4-57, Off Highway Vehicles Effects on Wetland-Riparian (Alternative A) Please see earlier comments relative to OHV closures in Chugach State Park and the desirability of citing applicable peer-reviewed studies relative to OHV damage. | Where applicable, including in Section 4.3.1.7.2, text throughout the Proposed RMP/Final EIS incorporates the clarification that limited OHV use is permitted in Chugach State Park (11 AAC 20.015), and that snow vehicles are permitted in designated areas when enough snow is on the ground to protect underlying vegetation (11 AAC 20.040). |
| 33 - 48 | Page 4-61, Off Highway Vehicles Effect on Wetlands-Riparian (Alternative D) Please see earlier comments relative to OHV closures in Chugach State Park. | Please see response to comment 33-47 under Edits Requested. Edits have been made in Section 4.3.1.7.5. |
| 33 - 49 | Page 4-65, Off Highway Vehicles Effect on Wetlands-Riparian (Alternative A) Please see earlier comments relative to OHV closures in Chugach State Park and the desirability of citing applicable peer-reviewed studies relative to OHV damage. | Please see response to comment 33-47 under Edits Requested. Edits have been made in Section 4.3.1.8.2. |
| 33 - 50 | Page 4-67,4-69, Off Highway Vehicles Effect on Wetlands-Riparian (Alternative C&D) Please see earlier comments relative to OHV closures in Chugach State Park. | Please see response to comment 33-47 under Edits Requested. Edits have been made in Sections 4.3.1.8.4 and 4.3.1.8.5. |
| 33 - 51 | Pages 4-90, 91, Lands and Realty We suggest checking references to Tables. Some of these references appear to be improperly numbered. As an example on page 91, the reference to fluid mineral leasing (see Table 2.3- 3) we believe should be Table 2.3-2. | The Proposed RMP/Final EIS provides corrected references to tables. |
| 33 - 52 | Page 4-123, Subsistence, Direct and Indirect Effects Common to All Alternatives for Subsistence. The first sentence in the first paragraph of this section is confusing. It is unclear what point the authors are trying to make and we request they revise the sentence to clarify its intent. | The first paragraph of Section 4.3.4.2.1 of the Proposed RMP/Final EIS has been revised to clarify confusing text. |

Edits Requested

| Comment # | Comment | Response |
|-----------|---|--|
| 33 - 53 | <p>Page 4-182, Subsistence, Past and Present Effects for Subsistence.</p> <p>The last sentence in the first paragraph states that "Tyonek residents use the Neacola Mountains for federally-managed subsistence harvests of mountain goats, sheep, and other resources." We are unaware of any source for this information and the text does not cite where a reader can find this information. A Division of Subsistence technical report describing subsistence uses in Tyonek does not indicate any harvest or use of goats and sheep by community residents during the period 1978-1984 (Fall et al, 1984, cited on page 3-221 of the draft plan). In addition, the discussion of subsistence uses in this plan (page 3- 221) also does not provide any evidence supporting the assertion that Tyonek residents harvest goats and sheep in the Neacola Mountains. More importantly, there is no federal subsistence priority for goats or sheep in Game Management Unit 16B, which includes the portion of the Neacola Mountains most accessible to Tyonek residents. We request the Bureau revise this section by either citing the source for this information or removing the information from the plan.</p> | <p>Tyonek residents had a historic use pattern of hunting sheep and caribou in the Neacola Mountains, but this practice ended by the 1940s, as moose became more readily available closer to the village. Since the paragraph refers to contemporary and continuing uses, the portion concerning Tyonek uses in the Neacola Mountains has been deleted from Section 4.4.6.2.1 in the Proposed RMP/Final EIS.</p> |
| 33 - 54 | <p>The third paragraph in this section discusses the "wealth imbalance between urban dwellers and rural people" as a factor affecting subsistence users in the south central region. Referring back to the list of communities in the south central region presented in Table 3.5- 25 (page 3-214), it is unclear which rural communities are being impacted by this wealth imbalance. It is also unclear what extent BLM lands are affected or involved, since the plan says unencumbered BLM lands in the south central region "represent a small portion of lands available for subsistence harvests, and subsistence users are not likely to utilize much of these lands for subsistence harvests because they are inhospitable or inaccessible" (page 3-220). We agree that a wealth imbalance between urban and rural residents is one factor that affects subsistence users and uses, but the authors do not make the case that this is a key factor involving BLM lands in the planning area.</p> | <p>Taken at a regional level, population growth and differential financial capacity to purchase and operate highly efficient transportation technologies is contributing to competition for resources and potential displacement of subsistence users. However, the major blocks of BLM- managed land in southcentral are too remote from communities to be affected. The Knik River parcel is affected by this trend and is encompassed within the subsistence use areas displayed in Figure 3.5-3 of the Proposed RMP/Final EIS. However, this land has been selected by an ANCSA corporation, and so is not subject to the Federal subsistence priority. The third paragraph of Section 4.4.6.2.1 of the Proposed RMP/Final EIS has been rewritten accordingly.</p> |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 58 | <p>Exceptions, Modifications, and Waivers, page D-I (paragraph 2).</p> <p>The introductory section addressing exceptions, modifications, and waivers, states that the first requirement is that "the circumstances or relative resource values in the area had changed following issuance of the lease." The State is concerned that a lease stipulation may be attached to a lease but the stipulation may not be appropriate for the entire lease area. An exception may be warranted because the specific area of activity does not justify the stipulation. As currently written, however, an exception could not be granted without demonstrating that something has changed.</p> <p>The exceptions themselves, included with each stipulation, are written in such away that this first requirement is inconsistent. For example, Stipulation 2 allows exceptions, if a specific area is not actually used by moose, which has nothing to do with changed circumstances. Therefore, the State recommends that the first requirement for granting an exception be deleted, or established as a separate independent justification for granting an exception.</p> | Thank you, comment acknowledged. |
| 33 - 64 | <p>Appendix F, Proposed Special Management Area Objectives. We suggest that an introductory paragraph be created that explains how these objectives will contribute to the development of an Integrated Activity Plan for each SMA and how that planning process will take place and under what conditions. This would also be an appropriate location to further clarify that Special Management Areas will not encumber either state or native selected lands and further planning processes are unlikely to take place until selections are adjudicated.</p> | Appendix F in the Proposed RMP/Final EIS has been revised to provide an overview of the proposed Knik River and Haines Block SRMAs and the Neacola Mountains ACEC. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 65 | <p>We find the Goals and Objectives for the proposed Special Management Areas to be reasonable and designed to provide for flexibility in the development of subsequent Integrated Activity Plans. However, we request that BLM consider revising the 2. Haines Block Special Recreation Management Area Goals and Objectives as follows:</p> <p>Insert new Goal 2. b. iii iii. Improve surface access by cooperating with the State of Alaska in the location and use of a Transportation and Utility Corridor(s) between Haines and Skagway.</p> <p>Insert new Objective 2. c. v. and renumber the current 2.c.v to 2.c.vi. v. Expand recreational opportunities through construction of an access road into the easternmost portion of the block (along the west side of Taiya Inlet).</p> | <p>Appendix F of the Proposed RMP/Final EIS does not include these changes. BLM believes these goals are outside the limits of benefit to the SRMA and are best addressed as part of the transportation plan proposals.</p> |
| 33 - 67 | <p>In order to make this section easier to read for people who may skip directly to the appendix, it may be helpful to insert the two maps depicting the proposed special management areas or include a page specific reference to those maps and tables in a paragraph for each SMA.</p> | <p>Thank you. Edits have been made in Appendix F.</p> |
| 41 - 5 | <p>The DRMPEIS on page ES-iii makes the following statement under Alternative B "Nearly all unselected...would be relinquished or rejected." This statement is not correct. Nothing in any planning process can in any way affect the Native and State selections or the rights that have been granted to the Native people or the State of Alaska. We suggest rewording to "...would be relinquished by the State or Native selector."</p> | <p>Agreed. The wording has been changed to read "...would be relinquished by the State or Native selector."</p> |
| 41 - 14 | <p>a. Pg. G 45-G46 -Mark Peterson, Metallica Resources, reported on 2005 exploration activities by Full Metal Minerals, Ltd. on the Alaska Peninsula at the November 2005 Alaska Miners Association Conference. Work was conducted at a number of deposits mostly located on Native lands (e.g. Mallard Duck, San Diego Bay, Apollo, and Shumagin).</p> | <p>Minerals information obtained for the Draft RMP/EIS only included Alaska Mineral Industry 2003 published data from the State of Alaska. The RFD was written in early 2005, so information reported at the AMA convention in 2005 would not have been available to include in the report, or used in the analysis. Activities occurring on Native lands would have a minimal (if any) effect on BLM unencumbered lands in the Alaska Peninsula region.</p> |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 41 - 15 | <p>b. Pg.G 48 -Two U.S. Bureau of Mines reports published in 1986 and 1987 provide significant additional information concerning mineral resources in the Hope/Girdwood/Summit Lake/Moose Pass areas of the Kenai Peninsula in the Chugach National Forest. Estimated placer production from the mid 1890's through 1982 was nearly 134,000 ounces and this fact should be included in the document. Also, resource estimates for several lode gold deposits in those areas were made based upon sampling and mapping of accessible workings. These reports are:</p> <p>i. Hoekzema, R.B. and S.A. Fechner. 1986. Placer Gold Sampling in and Near the Chugach National Forest, Alaska. BOM IC 9091. 42 pp.</p> <p>ii. Hoekzema, R.B., S.A. Fechner, and J.M. Kurtak. 1987. Evaluation of Selected Lode Gold Deposits in the Chugach National Forest, Alaska. BOM IC 9113. 62pp.</p> | <p>Lands within the Chugach National Forest are outside the jurisdiction of the BLM. BLM interacts with the USFS where a request for validity or patent application has been received. BLM is required to sign the "Mineral Examination Report" by a certified BLM Mineral Examiner. The Ring of Fire analysis mentioned the deposits within the area of concern, but only included them as examples of active mineral operations within the planning area boundary. Activities occurring on USFS lands would have a minimal (if any) effect on BLM unencumbered lands in the Kenai Peninsula.</p> |
| 41 - 16 | <p>c. Pg. G 56 -RFD needs to be defined (Reasonable Foreseeable Development Scenario?).</p> | <p>Appendix G in the Proposed RMP/Final EIS has been revised to incorporate the appropriate use of "RFD" and "RFD scenario." RFD is the acronym for "Reasonably Foreseeable Development." Attachments A and B present the RFD scenarios developed by BLM to project RFD for oil and gas resources and for locatable and salable minerals in the Ring of Fire planning area.</p> |
| 41 - 17 | <p>d. Pg. G 58 -Bob Stiles updated the progress of the Chuitna Coal project at the AMA November 2005 conference and again at the December 8th, 2005 RDC breakfast. He indicated that the intent is to begin construction as soon as 2007 or 2008 on the port facility and access road to the minesite.</p> | <p>Minerals information obtained for the Draft RMP/EIS only included Alaska Mineral Industry 2003 published data from the State of Alaska. The RFD was written in early 2005, so information reported at the AMA convention in 2005 would not have been available to include in the report, or used in the analysis. Activities occurring on State, Native, or private lands would have a minimal (if any) effect on BLM unencumbered lands in the area of the proposed coal project. There are no BLM unencumbered lands in the area, nor along the transportation corridors.</p> |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 41 - 18 | e. Pg. G 60 (1st paragraph) -Metal prices have all increased significantly since this appendix was written. Gold is currently (December 2005) selling at or above \$500/oz. If metals prices continue to increase or stay at current levels additional mining activity could result. | Section 4.2.1 of Appendix G in the Proposed RMP/Final EIS has been revised. Minerals information obtained for the Draft RMP/EIS only included Alaska Mineral Industry 2003 published data from the State of Alaska. The RFD was written in early 2005, so rising metal prices were not included in the analysis. As part of the RFD, numerous assumptions are made. It is assumed that metal prices fluctuate and this has been taken into consideration in developing the alternatives. It must be remembered that mineral exploration and development occurs over a long period of time, and numerous forces that are beyond our control have a large effect on the mineral industry; factors which were included in the analysis. |
| 41 - 20 | g. Pg. G 61-Alaska Peninsula/Aleutian Chain Region - "Development potential is generally expected to be low..." It must be clarified that this statement refers to development potential on BLM managed lands only and that BLM lands make up only a small portion of the district. | The second paragraph of Section 4.2.3 of Appendix G in the Proposed RMP/Final EIS has been revised to make this clarification. |
| 41 - 21 | h. Pg. G 66 Bibliography -This document is not complete. At a minimum, all reports now found in the ARDF (Alaska Resource Data Files) maintained by the USGS should be listed. | Although updated, the bibliography for Appendix G in the Proposed RMP/Final EIS does not include a complete listing of all reports in the ARDF. The bibliography presents only those documents used by the author in writing the appendix. |
| 41 - 22 | a. Pg. B-I last sentence -"However, ...the Neocola Mtn..., could remain closed to mineral entry." The AMA supports opening this area to potential exploration and development. Alternative Summary Table 2.6.1 does not indicate that the Neocola Mtn. area would be closed to mineral entry. ACECs do not close lands to mineral entry. This fact must be made known and this apparent contradiction needs to be clarified. | Agreed. ACECs do not preclude mineral entry, they only advise closer scrutiny and tighter restrictions through ROPs and/or Stipulations. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 41 - 23 | b. Pg. B3-2 -Alaska Peninsula/Aleutian Chain Area -The statement "No current exploration activity is occurring..." is incorrect. It may be true that there are few if any active federal mining claims but that may change. There is very active exploration on the lands in the area, both on State and Native and Native selected lands. Alaska Earth Sciences, Full Metal Minerals, Ltd. and Metallica, Ltd. are all actively exploring several prospects on the Alaska Peninsula. Exploration increased significantly in 2005 and it is expected to increase even more in 2006. | Minerals information obtained for the Draft RMP/EIS only included Alaska Mineral Industry 2003 published data from the State of Alaska. The RFD was written in early 2005, so information reported or published after that time would not have been available to include in the report or used in the analysis. Activities occurring on State or Native lands would have a minimal (if any) effect on BLM unencumbered lands in the Alaska Peninsula region. Activities occurring on Native-selected land could have an effect, but the effect would be minimal as well. Native-selected lands are closed to mineral entry until such time that the lands are conveyed to the Native corporation. Thus, mineral activity would need to be restricted to pre-existing active federal mining claims. Native-selected lands within the identified High Mineral Potential areas would most likely be rated "high priority" for conveyance. |
| 41 - 25 | c. Pg. B3-2 -Southcentral Region -Full Metal Minerals, Ltd. Is conducting advanced exploration work at the Lucky Shot Mine near Hatcher Pass. Also, various others continue to prospect and sample several of the lode gold prospects in the Hope/Moose Pass area on the Kenai Peninsula. These properties are located on Federal claims managed by the Chugach National Forest. | There are active mining claims in the area, however they are located on State lands. Effects to BLM unencumbered land would be minimal if any mineral activity were to occur. BLM would be involved in the Plan of Operations, and would work closely with the State during the review and permitting process. Also see response to comment 41-15 under Edits Requested. |
| 41 - 26 | d. Pg. B 4-1 -Table 2 -There is no reference to several notable lode gold prospects in the Hope and Summit Lake areas of the Kenai Peninsula. Prospects with identified resources (see IC9113) such as the Nearhouse, Gilpatrick, Heaston- Oracle, Hirschey-Lucky Strike, and Gilpatrick Dike prospects should be included on this table. | Please see response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. |
| 41 - 27 | e. Pg.B4-1 -4.1.2- Southcentral Region- Add the underlined: "No current lode development on BLM managed lands." As mentioned previously, this statement is not correct and there is advanced exploration/development work at the Lucky Shot Mine. | The Lucky Shot Mine is located on USFS land. See response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 41 - 28 | f. Pg. B4-1 -4.1.3- Southcentral Region: "Three small placer. ..." Small scale placer mining was also conducted on federal mining claims owned by the Hope Mining Company on Resurrection Creek near Hope. | The Resurrection Creek area is located on USFS land. See response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. |
| 41 - 29 | g.0 Pg. B4.1 -4.1.3- Southeast Region -"The Greens Creek Mine was the only. ..." This is not correct. There continues to be some placer gold production from claims in the Porcupine Creek district area near Haines. | Information received from BLM District Office personnel indicated that no permitted mineral activities were occurring on the active federal mining claims in the Porcupine Creek area. BLM would be involved in the Plan of Operations, and would work closely with the State during the review and permitting process. This area contains no BLM unencumbered lands. |
| 41 - 30 | h. Pg. B7.1-7.0 RFD Baseline Development Scenario -We understand that the scenarios discussed apply only to the development located on unencumbered BLM lands and State and Native selected lands which have not yet been conveyed. We recognize that development may be limited because of the time to explore and permit projects. However, these lands have been encumbered and restricted for several decades and as a result modern exploration techniques have not been applied to the area. If major deposits are identified, development could move ahead rapidly. It must be noted that metal prices are currently (December 2005) at high levels with gold at or above \$500/oz and copper at or above \$2.00/lb. Such prices will result in new exploration in nearly every district. | Please see response to comment 41-18 under Edits Requested. Until the lands are conveyed, they are closed to mineral entry. No undiscovered mineral potential analysis was conducted for the Ring of Fire planning area. However, areas of High Mineral Potential were identified in the Mineral Occurrence and Development Potential Report (Appendix G) and included in the RFD analysis. |
| 41 - 31 | i. Pg. B7-1 -7.3.3- Southcentral Region -To make the table more complete, information included in IC 9113 should be added to the table. Resource calculations are available for several of the prospects listed such as Crown Point, East Point, Skeen Lechner, as well as for several prospects not included on the table (Nearhouse, Jewell, Heaston Oracle,.etc.). An additional target in the Hope/Summit Lake area would be the felsic dikes such as the Gilpatrick dyke which have potential for significant tonnage (>1,000,000 tons) at low grades (.01- .03 opt). Exploration for such deposits has not yet occurred. | See response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. |

Edits Requested

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 41 - 32 | j. Pg.B8-1 -8.0- Southcentral Region -"Mineral Activity reported during 2003...". Resurrection Creek had some small scale placer mining occurring on claims owned by the Hope Mining Company. This activity has been nearly continuous since the late 1970's. Total surface disturbance has been relatively small over that time period. Carol Huber at the Chugach National Forest may have more specific information. | See response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. |
| 41 - 33 | k. Pg. B8-1 -8.2- South central Region -"There is expected to be a very small...". This is true on BLM managed and state selected lands. Off these lands, some development work and/or mining can be expected in the Hatcher Pass area at the Lucky Shot Mine and also on Federal placer claims in the Chugach National Forest along Resurrection Creek. | See response to comment 41-15 under Edits Requested addressing Chugach National Forest concerns. Also see response to comment 41-25 under Edits Requested addressing Hatcher Pass concerns. |
| 42 - 17 | Please also note a correction needed on page D-I, fifth paragraph: the word "accepted" in the first sentence should be "excepted", in order to accurately describe options for surface stipulations. | "Accepted" has been changed to "excepted" in the first sentence of the fifth paragraph on page D-1 in Appendix D of the Proposed RMP/Final EIS. |

End of section on Edits Requested

Enforcement and Monitoring

| Comment # | Comment | Response |
|-----------|--|--|
| 22 - 12 | News articles of wanton sheep killing on BLM lands and documented experiences of trying to get wildlife enforcement in the area are testimony to the threat to wildlife in the drainage. Sustainable habitat is a must. | BLM agrees that monitoring and enforcement are important for resource conservation. These issues are ongoing concerns for BLM and are tied to the ability of BLM to adequately fund and staff these efforts. BLM prioritizes the efforts needed across their widely dispersed lands to make the most effective use of their budgetary resources in any given year. BLM objectives include the promotion of healthy, sustainable ecosystems, but also acknowledge that proper enforcement is a continual issue. |
| 32 - 4 | We live on the South side of Knik River and can see several miles of the BLM land along the north side of the Knik River. In a year, we can see 20 to 30 cars burning at night, cars which just a couple hours before were stolen in Anchorage or Eagle River and are now burning in the Knik River. When I contact the AST, their response is "we don't have a vehicle to get out there". On a good year 100 burned cars will be removed from this area. | Preliminary management objectives 1(c)iv and v in Appendix F in the Proposed RMP/Final EIS addresses this concern. Specific enforcement policies and responsibilities will be established during implementation-level planning, which will occur after completion of the Proposed RMP/Final EIS. BLM agrees that enforcement is a continual issue in this area. |
| 37 - 3 | Many of the problems can be solved by better law enforcement. | See response to comment 32-4 under Enforcement and Monitoring. |
| 79 - 6 | I fully support the idea of closely monitoring the impacts to wildlife and traditional human uses of the public lands surrounding these communities. There is steady and increasing pressure for commercial exploitation of the limited area between these communities and the Canada border. Few citizens of the region would want to see the impacts of Juneau, Anchorage, or the immediate vicinity of Skagway in the interior valleys. | Thank you, comment acknowledged. |
| 85 - 13 | An argument can be made that one reason for its failure is because the state lacks any mechanism for enforcement or that the public is unaware that such a policy exists. BLM does have enforcement authority so perhaps the policy, with sufficient enforcement, could provide some resource protection. However, the policy has a big ambiguous hole in its center-"whenever possible"-which, in my opinion, makes enforcement and even public education impossible. | The State's statute may be more effective on the ground in some areas than others because State enforcement personnel are called upon to enforce many laws and regulations throughout the state. The State does focus attention on problem areas. It is the BLM's intent, on State-selected lands, to emphasize education regarding the policy and the benefits of using existing trails, but also to enforce where deliberate OHV use off of existing trails is causing resource damage. |

Enforcement and Monitoring

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 87 - 7 | Public land managers have ignored the problems and admitted that the Knik River Valley has been sacrificed to unchecked recreation. | Comment acknowledged. BLM will work to address these issues in future implementation planning efforts for the Knik River SRMA. |
| 111 - 4 | PLEASE REQUIRE GPS COORDINATES FOR ALL LANDING AND PICK-UP SITES IN ORDER TO MONITOR PERMIT COMPLIANCE. | Although the recommendation is outside the scope of the Proposed RMP/Final EIS process, BLM will consider this recommendation when updating permitting requirements. |

End of section on Enforcement and Monitoring

Fish

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 43 - 15 | The Chilkoot River is also important for sport fishing; that was estimated to have brought in about one million in 2002. The lake, river, and small spawning streams are essential spawning ground for four species of salmon which are important to the Haines fishing fleet as well as to the sport fishermen and the wildlife. | BLM agrees that the Chilkoot River is important for sport fishing. Pursuant to this end, BLM management directives common to all alternatives espouse cooperation with other BLM programs (e.g., wildlife, vegetation, lands and realty, etc.) and other federal agencies and the state identifying need for relocation, closure, or maintenance of OHV trails to avoid key habitat features. |

End of section on Fish

Hazardous Materials

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 5 - 3 | Unfortunately, what your picture there doesn't show is the burned out loads of cars that are quite often -- and, I believe, that's at the mouth of Jim Creek, quite often out there in the water, polluting the water. | BLM acknowledges that there has been some environmental degradation of natural resources in this part of the Knik River valley (see 1.3.1 of PRMPF/EIS). Relative to these potentially hazardous materials, BLM's management objectives state that impacts caused by past hazardous materials will be mitigated subject to the availability of funds. Moreover, the implementation level planning for the Knik River SRMA (Figure 2.3-5) will have a beneficial impact on the regulation of hazardous materials in the area. |
| 22 - 16 | Far to many vehicles are losing fluids-sometimes in their entirety-into anadromous waters. | Please see response to comment 5-3 under Hazardous Materials. BLM agrees that potential pollution from vehicles losing fluid is a problem. Management actions proposed under all alternatives for hazardous materials may have localized, beneficial effects on water quality through prevention measures and mitigation practices as sites become known. |
| 22 - 17 | Thousands of rounds of lead are indiscriminately leached into the watershed annually. | BLM acknowledges that leeching of lead poses of potential problem to water quality. Management actions proposed under all alternatives for hazardous materials may have localized, beneficial effects on water quality through prevention measures and mitigation practices as sites become known. Water resources management objectives are described in section 2.5.10.1. Creation of the Knik River SRMA implementation plan will work towards creating a healthy and safe environment for all users and residents of the area. |
| 32 - 3 | There are also problems with dumping, often involving hazardous materials. This includes lead acid batteries, unknown chemicals, solid waste materials and used building supplies. | Please see response to comment 5-3 under Hazardous Materials. |

End of section on Hazardous Materials

Lands and Realty

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 11 - 2 | I'm a little unclear on what's going on down in Haines, so I'll probably try to give written comments on that. I'm a little curious on what's happening on the ridge, the stair step area up above Lake George and what kind of management is going to happen there and whether that deserves some special looks in that it is a large contiguous area | See response to comment 54-3 under Special Management Areas |
| 16 - 13 | Haines Area BLM lands that will be transferred to the state should be recommended as low priority for improved access. | BLM will continue to manage lands over which we have responsibility in a manner consistent with the requirements of FLPMA, through the application of the ROPs and stipulations (Appendix D), and other applicable laws. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. |
| 25 - 7 | Lands not selected by the State or private corporations and are retained by federal ownership should be managed under the regulations created by the Knik River Public Use Area. | Please see response to comment 16-13 under Lands and Realty. |
| 28 - 7 | Finally, it is our understanding that BLM is signatory to an agreement which will convey its lands within the Palmer Hay Flats State Game Refuge, a legislatively designated area (LDA). To date, only the Knik River Access lands have been conveyed. We would request that BLM complete the agreed-to conveyance of these lands to the State of Alaska, Palmer Hay Flats State Game Refuge, preferably before finalization of the RMP/EIS. | Thank you, comment acknowledged. BLM is pursuing this land transfer. |

Lands and Realty

| Comment # | Comment | Response |
|-----------|---|--|
| 33 - 6 | These (d)(l) withdrawals are no longer appropriate for two reasons: 1) most were made to enable ANCSA selections that have long since been completed, and 2) they supported the study of federal lands for possible designation as conservation system units, which was resolved by Congress with the Alaska National Interest Lands Conservation Act (ANILCA). | The withdrawals are a series of Public Land Orders (PLOs) issued by the Secretary of the Interior under the authority of Section 17(d)(1) of ANCSA that withdrew and reserved federal lands in Alaska for study and classification. These ANCSA 17(d)(1) withdrawals closed or segregated the lands from entry and disposal under all the public land laws (including mining and mineral leasing laws) except for PLO No. 5180, which allowed location for metalliferous minerals. The purpose of these orders was to maintain the status quo of the lands in order to complete inventories and assess resources for consideration in land management objectives for present and future public needs. Although the Secretary of the Interior has the authority to modify or revoke these withdrawals, such action usually occurs following the completion of land use plans. Revoking withdrawal orders issued under ANCSA 17(d)(1) is an administrative decision sufficiently guided by laws and regulations. BLM will maintain administrative withdrawals for other Federal agency's use and programs until, and unless, the agency for which the land was withdrawn requests revocation of the withdrawals. |
| 33 - 13 | We recommend conditioning the text in the Introduction, Chapter 2, and Appendix F to make it clear that these lands will be managed as special management areas should they be retained in long term BLM ownership. Nothing in this plan encumbers state or native selected lands. More specific suggestions are included in the Page Specific Comments. | Thank you for your comment. Text edits have been made in Chapter 2 and Appendix F. |
| 33 - 20 | Since Congress intended federal agencies to not categorize trapping as a commercial activity (unless it meets the criteria above), the decision by the Bureau to categorize trapping as a commercial use and require a lease for use on Bureau lands is incorrect. We request the Bureau correct this oversight in the final plan. | We disagree. BLM manages the leasing of public lands under the authority of FLPMA and the regulations found in 43 CFR 2920 and 43 CFR 8372 and the guidance found in BLM manual 2920.05 A, which addresses the leasing of public lands for trapping cabin purposes. |
| 36 - 5 | Some of the nominated parcels have been selected by Native corporations or the state and are awaiting adjudication. Until they are conveyed, we urge BLM to use the recommended protection designations to preserve the unique biological values of these parcels. | Please see response to comment 16-13 under Lands and Realty. |

Lands and Realty

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 38 - 1 | The map provided at the meeting showed several small (1 acre to maybe 200 acres) scattered all over the Kenai Peninsula. The best use of these small parcels would be sell them to the public. The University of Alaska has been selling by sealed bid. Maybe it will work for BLM. | The sale of public lands through FLPMA Section 203 (43 CFR 2710) is discussed in Chapter 2, Section 2.3.1.2 Management Common to All Alternatives. |
| 41 - 7 | The BLM must also continue to expeditiously complete the transfer of remaining State and Native selections so that the land ownership pattern is clear to all interested parties. | Recent legislation has taken steps to speed up the conveyance process, and BLM is committed to fulfilling State and Native corporation entitlements. |
| 41 - 9 | 1. Open lands to Mineral and Energy Resource Exploration and Development (claim staking, leasing, sales) -This can best be accomplished by expeditiously clearing land title (finalizing State and Native selections), arranging for sale, disposals and exchanges of the many scattered and often isolated small parcels of land, and working to revoke the withdrawal orders issued under Section (d)(1) of ANSCA. | See response to comment 41-7 under Lands and Realty. Land tenure adjustments, disposals and acquisitions are analyzed when in the national interest. Land acquisition or disposal actions will include land transfers, exchanges, and sales as allowed under FLPMA, the Recreation and Public Purposes Act of 1954 and other applicable laws. Revoking withdrawal orders issued under ANCSA Section 17(d)(1) is an administrative decision sufficiently guided by laws and regulations. |
| 41 - 24 | Mineral deposits do not follow political or land ownership boundaries so it is entirely possible that deposits primarily on State or Native lands will extend onto 8LM managed lands. Nothing should be done with federal lands, including access restrictions, that could adversely impact projects on State or Native lands. | Please see response to comment 16-13 under Lands and Realty. |
| 43 - 20 | However much still needs to be done and we could certainly use any help you have to offer, either by designating the river for some more protected status or by transferring BLM land to State Parks which already has management control of most of the land along the lower river. | BLM stands behind its evaluation of the river. The river's status is based on our analysis of the conditions of the river and the area. The consideration of transfer of lands between agencies is beyond the scope of this plan. |
| 72 - 1 | Due to the relative small acreages involved in the Kenai Peninsula parcels the best use is private property. Property should be sold. | Please see response to comment 38-1 under Lands and Realty. |

Lands and Realty

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 79 - 4 | Changes in Land Ownership-I have some concerns with ANCSA withdrawals. Some former public domain lands have been abused under these provisions. While there are clear examples of native use and rights to historic lands, there needs to be some form of safeguard on protecting the integrity of the motivations for certain claims. It would be well to consolidate and streamline holdings and parcels only if the exchanged parcels have some protections, and can be exchanged with other agencies. | There is no requirement for BLM to protect the integrity of the motivations for certain claims. Please see response to comment 119-12 under Lands and Realty. |
| 80 - 2 | Changes in Land Ownership I believe that the BLM should give up this area to the state as it has been selected by the Legislature for transfer of ownership. Obviously the BLM does not see this as a priority, and will probably not do this. | Please see response to comment 41-7 under Lands and Realty. |
| 119 - 12 | In addition to the specific comments below, we recommend that within all proposed and accepted Areas of Critical Environmental Concern (ACEC) and Special Recreation Management Areas (SRMA) in the Ring of Fire planning area, BLM maintain the ANCSA § 17(d) (1) withdrawals and Public Land Orders prohibiting oil, gas, and locatable mineral entry. | In those areas where the temporary withdrawal of public lands provided by ANCSA Section 17(d)(1) has fulfilled its purpose of limiting land status conflicts, it is appropriate to revoke the withdrawal and manage the lands according to multiple use concepts consistent with the resource values present. |
| 119 - 22 | Moreover, for the same reasons that the Neacola tracts should be afforded ACEC status, BLM should consider transferring to the National Park Service (NPS) ownership of the two Neacola Mountains ACEC tracts for inclusion as part of Lake Clark National Park and Preserve. BLM should seriously evaluate for park status administratively protected lands adjacent to existing national parks. We believe that management by the NPS, which has staff living and working in the immediate area, would afford even stronger protections to the remarkable scenic, wildlife and recreation resources identified in the proposed Neacola Mountains ACEC. | The consideration of transfer of lands between agencies is beyond the scope of this plan. |
| 119 - 42 | Although recent legislation indicates that the remaining land transfers will be completed within the next five years, BLM has the responsibility to establish the best possible management practices for all land it administers in the interim period. | Please see response to comment 16-13 under Lands and Realty. |

Lands and Realty

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 87 | BLM should proactively manage all lands it administers, regardless of status, until conveyed. Management of selected lands should err toward conservative stewardship obligations. This will ensure that the lands remain in high quality, minimally disturbed resource condition when, and if, BLM conveys the State-and Native-selected lands. By preserving lands it administers today, BLM is preserving lands it may retain after conveyances, and over-selection issues, are resolved. | Please see response to comment 16-13 under Lands and Realty. |
| 119 - 90 | We oppose BLM's plans to lift all of the protective ANCSA § 17 (d) (1) withdrawals in the planning area, thereby opening all available acres to locatable and leasable mineral entry. Neither Alternative D nor the measures proposed in the ROPs and Stipulations for surface disturbing activities would effectively prevent direct and cumulative impacts to existing public resources, such as recreation opportunities, wildlife habitat, and visual resources. Neither would be stringent enough to protect these resources in the event of a blanket removal of the ANCSA § 17 (d) (1) withdrawals. Maintaining ANCSA § 17 (d) (1) withdrawals within areas that are under consideration and/or are recommended for special management will afford the maximum protection for resource values | Please see response to comment 119-12 under Lands and Realty. |

Lands and Realty

| Comment # | Comment | Response |
|-----------|---|--|
| 119 - 118 | <p>This section of the Draft RMP/EIS also failed to explain how BLM's planning process – which likely will open to mineral development lands that have been protected for decades – relates to its ongoing review of the ANCSA § 17 (d)(1) withdrawals. BLM failed to even mention the d-1 review, even though it identified other plans and planning processes relevant to the Ring of Fire RMP/EIS and included a description of the d-1 withdrawals. By failing to mention the concurrent d-1 review process, BLM misled the public and possibly the decisionmakers, by creating the impression that the Ring of Fire planning process is the only forum where it is reviewing the status of the d-1 withdrawals. Because both the d-1 and the Ring of Fire planning processes address the d-1 withdrawals (or a portion of them) and will likely result in the termination or revocation of some or all of the d-1 withdrawals, the Draft RMP/EIS should have explained the relationship between the two processes. By failing to do so, BLM failed to adequately inform the public about this important issue.</p> | <p>The intent of the ANCSA Section 17(d)(1) withdrawals was not to protect lands from mineral development. The withdrawals are a series of Public Land Orders (PLOs) issued by the Secretary of the Interior under the authority of Section 17(d)(1) of ANCSA that withdrew and reserved federal lands in Alaska for study and classification. These ANCSA Section 17(d)(1) withdrawals closed or segregated the lands from entry and disposal under all the public land laws (including mining and mineral leasing laws) except for PLO No. 5180, which allowed location for metalliferous minerals. The purpose of these orders was to maintain the status quo of the lands in order to complete inventories and assess resources for consideration in land management objectives for present and future public needs. Although the Secretary of the Interior has the authority to modify or revoke these withdrawals, such action usually occurs following the completion of land use plans.</p> <p>Chapter 3, Section 3.3.4.4 Withdrawals clearly discusses the ANCSA Section 17(d)(1) review process.</p> <p>The BLM will assess BLM-managed lands to determine the extent of available information regarding resource values, prior planning decisions, and land ownership patterns. Based on available data and known management objectives, BLM will make recommendations to Congress on lands that can be opened to entry, primarily for mining and mineral leasing. It is important to note that for the majority of the planning area the lifting of these withdrawals will have little or no effect because the lands have been selected by either the State or by an ANCSA corporation. The BLM Report to Congress inventories Sec. 17(d)(1) withdrawals and recommends the decisions to maintain or recommend the lifting of the withdrawal be made as part of the planning process. We have included this information in Chapter 2.3.1, Lands and Realty, Withdrawal review and to the discussion of withdrawals found in Chapter 3.3.4.4. Withdrawals.</p> |

End of section on Lands and Realty

Leasable Minerals

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 24 - 5 | Moreover, coal bed methane and natural gas activities should be located away from population centers and growth areas. | Comment acknowledged. BLM manages public lands for multiple uses in accordance with the Federal Land Policy and Management Act (FLPMA). Land use decisions are made that protect the resources while allowing different uses of those resources, such as energy development, and recreation. Where there are conflicts between resource uses, or where a land use activity may result in unacceptable or irreversible impacts to the environment, BLM may restrict or prohibit some land uses in specific areas. These are areas where it has been determined that other land uses or resource values cannot be adequately protected, and appropriate protection can be ensured only by closing the land to leasing through either statutory or administrative requirements. |
| 28 - 2 | <p>We are very concerned about the proposals for these lands as stated in this study, particularly as they pertain to any oil, gas, or mineral extraction activities. For example:</p> <p>Comparison of Alternatives -Fluid leasable Minerals (page 2-17)</p> <p>"To protect habitat for migratory birds within the Palmer Hay Rats (Figure 2.3-5), no oil and gas exploration activity or road building is allowed from March 15 to June 1, and from September 1 to October 31."</p> <p>This statement does not take into account the breeding and nesting of the thousands of dabbling and diving ducks, sandhill cranes, several species of geese and shorebirds during June, July and August.</p> | <p>Thank you for the comment. To protect habitat for migratory, stopover, and staging shorebirds and waterfowl; and habitat for breeding, nesting, and brooding of waterfowl, shorebirds, raptors, cranes, and song birds within the Palmer Hay Flats (Figure 2.3-5), no oil and gas exploration activity or road building is allowed from March 15 to October 31 (Appendix D).</p> |
| 28 - 4 | Additionally, the public's recreation and enjoyment of their Refuge would not be served by extraction activity at any time. | BLM will ultimately convey the Palmer Hay Flats to the State of Alaska. Future actions are subject to the application of the ROPS and stipulations as appropriate, and will go through the NEPA process, which may develop mitigation measures related to the potential impacts of the activity being considered. |
| 28 - 15 | WHEREAS, oil and gas leasing is not compatible with the stated mission and intent of the Palmer Hay Flats State Game Refuge Management Plan; | Thank you, comment acknowledged. See response to comment 28-4 under Leasable Minerals. |

Leasable Minerals

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 28 - 16 | WHEREAS, oil and gas leasing is anathema to critical wildlife habitat on Refuge lands; | Thank you, comment acknowledged. See response to 28-4 under Leasable Minerals. |
| 119 - 99 | BLM Failed to Comply with NEPA in analyzing mineral leasing impacts — In direct contravention of its duty to take a “hard look” at potential environmental effects, BLM solely listed general potential impacts. For instance, in Alternative B its analysis of the impacts of leasing on wildlife species constituted a single sentence: “[L]ocalized adverse effects to wildlife species and habitats may occur.” Draft RMP/EIS at 4-40; see also Alternative D at 4-43 (stating effects of Alternative D would be similar to Alternative B). BLM made no attempt to differentiate between species, identify species that may be particularly sensitive to development, or explain which habitats are most likely to be affected. See Draft RMP/EIS 4-38 (“Mining and oil and gas leasing could have adverse effects to wildlife species and important habitat”). | The Proposed RMP/Final EIS was prepared in accordance with applicable law. We took a hard look at the direct, indirect, and cumulative impacts of the decisions that were made. Our actions were in accordance with NEPA, the regulations issued by the Council on Environmental Quality, as well as the Department and our NEPA Handbook, H-1790-1 as well as other applicable environmental laws. |

Leasable Minerals

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 115 | <p>BLM's analysis of environmental impacts connected with Leasable and Locatable Minerals in each of the four alternatives in the Draft RMP/EIS was patently inadequate. For the reasons stated below, BLM must issue a revised Draft RMP/EIS to correct these deficiencies and to comply with its NEPA mandates.</p> <p>Most fundamentally, the Environmental Consequences chapter of the Draft RMP/EIS failed to identify a single environmental impact associated with the various levels of new leasing and mineral development that BLM proposed under each the four alternatives. Instead, its analysis of Leasable and Locatable Minerals under each alternative focused entirely on the reduced access to mineral resources that would occur where lands remain closed to mineral entry. This is a perversion of BLM's mandate under NEPA.</p> <p>NEPA requires an analysis of the direct and indirect impacts of the proposed activity on the human environment. The human environment includes the full range of environmental values, including water quality and quantity, air quality, fish and wildlife, wetlands, and so on. Indeed, at the beginning of the Environmental Consequences chapter, BLM identified the "critical elements" of the human environment that must be addressed in its environmental analysis. In its subsequent discussion of the environmental consequences of each alternative treatment of Leasable and Locatable Minerals, however, BLM utterly abdicates this responsibility, not even identifying a single impact to the human environment as a result of opening up new lands to mineral entry.</p> <p>BLM failed justify its lack of analysis. It cannot justify its failure to comply with its NEPA mandate on the theory that opening new BLM lands to mineral entry will not actually result in any mineral development in the foreseeable future. BLM foreclosed that argument by acknowledging its assumptions that oil and gas development will occur, that small placer mines are likely to be developed within the planning area, that development of nickel and platinum group elements (PGE) may occur, and that there will be increased demand for gravel to support road maintenance and construction. Since BLM assumed that these various forms of mineral development are likely to occur within the planning area during the life of the plan, the Draft RMP/EIS should have analyzed the potential environmental impacts of that projected mineral development.</p> | <p>Environmental impacts for leasable and locatable minerals were discussed in the preceding sections by resource. There is no need to restate them if the consequences are the same across all alternatives. Mineral development will occur on historic mining areas. No locatable mineral development will occur without a Plan of Operations, which contain site specific ROPs and stipulations, as well as abiding by all federal and state laws and regulations Mineral activities will be monitored using existing BLM 3809 regulations.</p> <p>No placer mining activity is projected to occur outside of existing historical areas. Any placer operation would have a disturbance of 1 to 5 acres and reclamation would be occurring along side the mining operation. Less than 60 acres may be potentially disturbed on BLM lands (Section 4.2, Placer Gold). No hard rock mineral development is projected to occur within the planning boundary (Section 4.2, Other Deposits).</p> <p>Also, refer to Chapter 4, Environmental Effects. Specifically, Section 4.3 addresses direct and indirect effects and Section 4.4 addresses cumulative effects. The analysis is structured so that effects FROM potential mineral entry ON other resources are discussed under that particular affected resource (i.e. wetlands). The impacts analyzed in Chapter 4, Environmental Consequences, are based on land use activities (and their associated disturbances) identified in the Reasonably Foreseeable Development Scenarios for Oil and Gas and Locatable/Salable Minerals.</p> <p>Mitigation to avoid impacts are addressed in Appendix D. Additionally, further NEPA analysis will be conducted on site specific areas associated with any proposal to use lands open to mineral entry as well as being considered in implementation level plans.</p> |

Leasable Minerals

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 117 | BLM's analysis of Leasable and Locatable Minerals is flawed in several other respects. BLM's stated goal for Leasable and Locatable Minerals was far too narrow and failed to adequately consider the protection of sensitive resources on BLM lands. The goal as articulated emphasized the facilitation of increased resource development with a passing nod to protection of environmental values. BLM's land management mandate, however, extends far beyond resource development. BLM has a duty to protect the sensitive biological resources on its lands and to safeguard the public trust in those resources. Thus, BLM must revise its goal for Leasable and Locatable Minerals and place greater emphasis on protecting sensitive resources such as water quality, air quality, wildlife habitat, subsistence resources, and wilderness values. | Please see response to comment 119-116 under Cumulative Effects. |
| 119 - 120 | It also stated in its summary of alternatives for Leasable Minerals, Oil & Gas that all "essential habitat" for threatened and endangered species will be avoided. BLM should provide a definition of "essential habitat." | The term essential habitat was used to describe critical habitat for threatened and endangered species in the alternatives for leasable minerals, and oil and gas in the Draft EIS/RMP. This wording has been corrected throughout the document. USFWS is responsible for the designation of critical habitat for threatened and endangered species. |
| 119 - 131 | Should there exist deposits of coal bed methane in the planning area, BLM should seek extensive public input, respect local laws and regulations, and develop stringent mitigation guidelines before allowing development of these resources. For example, BLM should require adherence to the Matanuska-Susitna Borough regulations (MSB Chapter 17.62), adopted in October 2004, that require a conditional-use permit for any exploration and development of coal bed methane within the borough. | Please see response to comment 23-3 under Coordination and Compatibility. |

End of section on Leasable Minerals

Locatable and Salable Minerals

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 41 - 6 | The four planning regions included in the Rim of Fire DRMPEIS each include known deposits of locatable, saleable, and leasable minerals. Of potentially even greater significance, is the potential for discovery of additional mineral resources. Substantial lands within the study area have been closed to mineral entry since 1971 by the passage of ANCSA. Since that time new deposit models for mineral resources have been developed and applied to contiguous areas. Major discoveries have resulted, such as Greens Creek in the Southeast Region and Pebble in the South central Region. All section 17(d)(1) lands should be opened as soon as possible. | Please see response to comment 33-6 under Lands and Realty. |

End of section on Locatable and Salable Minerals

Mapping

| Comment # | Comment | Response |
|-----------|--|---|
| 23 - 2 | The Ring of Fire Draft did not contain adequate maps identifying sub surface ownership so we can only assume that these lands and their sub surface are under the control of BLM and the Federal Government. Not having accurate maps or information on sub surface ownership makes it difficult to address this issue in a comprehensive manner. | Agree. Presently, survey data is incomplete to accurately map all BLM subsurface lands in the Proposed RMP/Final EIS. However, additional subsurface maps were added to the document (Appendix A, Figures 3.7-1 and 3.7-2). |
| 33 - 36 | <p>3.3.4.7 Access, Southeast Region, page 3 -143 Please expand upon the last paragraph on page 3-143 by adding the following: "The State of Alaska has prepared the Southeast Alaska Transportation Plan (SA TP 2004), which identifies 34 essential transportation and utility corridors to improve connectivity throughout the region. The ultimate development plan is to construct a highway through each of these corridors. Corridor number 2 extends southerly from Dyea (to the west of Skagway) along Taiya Inlet to Taiya Point, and then on to the Haines road system. This corridor crosses the easternmost portion of the Haines Block Special Recreation Management Area. Although these townships are state-selected, due to over-selections, there is a strong possibility that these townships will remain BLM-managed."</p> <p>Web link to the SATP: http://www.dot.state.ak.us/stwdplng/projectinfo/ser/newwave/SATP_FINAL/index.shtml</p> <p>See in particular Map 16: http://dot.alaska.gov/stwdplng/projectinfo/ser/newwave/SATP_FINAL/assets/Map16.pdf. Our practice with other federal agency plans (i.e. USFS) has been to show a Transportation and Utility Corridor for state-proposed corridors on the associated EIS maps. We request that BLM consider illustrating the proposed transportation corridor crossing the Haines Block Special Recreation Management Area in Figure 2.3-4.</p> | The proposed transportation corridor has been added to Figure 2.3-4 in the Proposed RMP/Final EIS. |
| 33 - 57 | <p>Fluid Mineral Leasing, Figures 2.3-17 We were unable to locate a map depicting areas open for Fluid Mineral Leasing - Alternative D for Kodiak and the Alaska Peninsula. We assume that the map would be the same as for Alternative C and E in that all areas are open. However, clarification or insertion of a map for this region would be helpful.</p> | Thank you for your comment. The map for Fluid Mineral Leasing - Alternative B for Kodiak and the Alaska Peninsula would be the same as for Alternative D. The map edit has been made in the Proposed RMP/Final EIS. |

Mapping

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 33 - 63 | Figures D-5 and D-6, Swan Nesting Habitat Map. The maps shown in Appendix D do not apply the multi-year datasets that are available from the US Fish and Wildlife Service Migratory Bird Management Program. Trumpeter swan nesting is much more extensive in these areas than indicated on the map. We recommend the Bureau contact the US Fish and Wildlife Service Migratory Bird Management Program in Juneau for comprehensive maps of swan nesting habitat. | Thank you. The maps have been changed to reflect recent data on swan nesting habitat (Appendix D). |
| 41 - 11 | 3. Geophysical and Geologic Mapping -We encourage BLM to continue its efforts to conduct modern geophysical, geochemical and water surveys along with geologic mapping and mineral and energy resource studies. Up-to-date information will be needed to properly implement the Final RMPEIS. We especially encourage more detailed assessments of the larger blocks of BLM managed land such as the Knik and Neacola Mountain blocks and, depending on ultimate dispensation, larger State/Native selected blocks such as the Haines block and any other large areas currently closed by ANCSA Section (d)(1). | Thank you, comment acknowledged. |
| 41 - 12 | 4. Improve Readability of Map Figures -Map color choices along with the extremely small map scales, make it very difficult to distinguish between State Selected lands and water bodies and native selected lands and "other federal" lands (see especially figures G-2-5, G 15-33). | Map color choices and scales adhere to BLM GIS standards. |
| 41 - 19 | f. Pg. G 60 (4.2.3) -Maps clearly depicting land status as the underlay, with an overlay of mineral occurrence potential should be included. The small map scales and lack of geographic detail make it difficult to locate individual deposits. | Thank you, comment acknowledged. |

Mapping

| Comment # | Comment | Response |
|-----------|--|---|
| 42 - 10 | EPA is concerned that the Draft RMP/EIS contains conflicting information regarding the proposed Neacola Mountains ACEC, which should be corrected for the Final RMP/EIS. The text information presented in Volume 1 of the Draft RMP/EIS describes the proposed ACEC as a single area of approximately 229,000 acres, referred to as the southern block. However, the maps in Volume 2 consistently and incorrectly show two separate areas for the proposed ACEC; the southern block that is described in the text and a second northern block that contains the Chilligan River, among other natural features. The map discrepancy also showed up in a poster board that was used during the BLM's Draft RMP/EIS public hearings. The BLM clarified during the Anchorage public hearing, which EPA attended, that the map was in error and the description of the proposed ACEC that was included in the Draft RMP/EIS text was correct. | Notification of the correction was sent to those on the project mailing list and was posted on the BLM website. Both the letters and posting indicated that BLM extended the comment period 30 days (to January 30, 2006) to allow appropriate time for review of the corrections and invite additional comments regarding this matter. Please also see response to comment 53-2 under Special Management Areas. |
| 47 - 4 | Your map on Trumpeter Swan nesting indicates that there are no swan nests in the Knik River region. This is inaccurate. I believe that Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service both have data indicating the historical and continued presence of nesting and rearing Trumpeter Swans. A good bit of this data comes from retired biologist/pilot William Quirk who has conducted aerial surveys documenting nesting and migratory swan use since 1998. Local residents and users have observed nesting swans for years. Finally, waterfowl surveys conducted in summer 2005 as part of the USFWS Coastal Management Grant Program, also documented nesting Trumpeters. In fact, one pair successfully reared eight cygnets! | The maps have been changed to reflect recent data on swan nesting habitat (Appendix D). Please see response to comment 33-63 under Mapping. |
| 119 - 130 | BLM failed to provide adequate maps identifying sub-surface ownership in the planning area. Thus, it is difficult for the public and the decisionmaker to assess where coal bed methane resource exist on lands BLM administers, either in the long-term or in the interim while it still maintains ownership of State and Native selections. | Please see response to comment 23-2 under Mapping. |

End of section on Mapping

Natural Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|--|---|----------------------------------|
| 22 - 18 | As vegetation is destroyed, the glacial winds propel increasing amounts of silt down river. | Thank you, comment acknowledged. |
| 22 - 19 | And, as you are aware, dumping of all manner of trash is rampant. | Thank you, comment acknowledged. |
| 39 - 4 | Also, airborne particulates reduction is a large expense for Anchorage that should not be made worse by ORV and trailer transfer. | Thank you, comment acknowledged. |
| <i>End of section on Natural Resources</i> | | |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 6 - 2 | I would like to also say that I do fully support this process, whether or not we restrict or open up any areas. I think this is definitely a very needed thing. | <p>Under NEPA (40 CFR 1500-1508), BLM is required to involve the public through public hearings and/or meetings in order to provide project information to interested parties, as well as to solicit appropriate information. Gathering input on the Draft RMP/EIS from potentially affected members of the public and other stakeholders is essential to the preparation of an effective Proposed RMP/Final EIS. BLM appreciates your participation in the public process.</p> <p>NEPA (40 CFR 1506.6) also requires BLM to make the Proposed RMP/Final EIS available for a protest period. The public will be notified of its availability by mail (if part of the project mailing list), newspaper, BLM website, and Federal Register.</p> |
| 7 - 2 | First, I want to thank URS and BLM for taking the time to come up to Palmer and for answering all our questions. And just for all your work along the way. Alaska Coalition has submitted scoping comments and also submitted some nominations for special area status. And I reviewed the draft document, and I found that they addressed the concerns that we submitted, so I really appreciate the public process. | Please see response to comment 6-2 under NEPA Compliance. |
| 7 - 4 | We strongly support the community based public process that will occur should this be included in the final. | See response to comment 6-2 under NEPA Compliance. |
| 8 - 2 | We appreciate the BLM going through this process. The public process is very important. | Please see response to comment 6-2 under NEPA Compliance. |
| 17 - 13 | Thank you for this opportunity to comment. | Please see response to comment 6-2 under NEPA Compliance. |
| 18 - 6 | Thank you for considering our thoughts on this project. | Please see response to comment 6-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 19 - 8 | Thank you for considering our views. Please keep us informed of further progress on this RMP project. | Please see response to comment 6-2 under NEPA Compliance. |
| 20 - 1 | Sealaska Corporation appreciates receiving the CD that details the Ring of Fire EIS project and offers the following preliminary comments, which are limited to Southeast Alaska, for your consideration. | Please see response to comment 6-2 under NEPA Compliance. |
| 20 - 4 | The EIS mentions Carlana Creek near Ketchikan as a special area. Sealaska urges the BLM to carefully review the comments of those who live in the Ketchikan area. | Please see response to comment 6-2 under NEPA Compliance. |
| 20 - 6 | Thank you for providing Sealaska Corporation the opportunity to comment. | Please see response to comment 6-2 under NEPA Compliance. |
| 21 - 2 | Thanks for considering my concerns. | Please see response to comment 6-2 under NEPA Compliance. |
| 24 - 1 | Thank you for the opportunity to review the draft copy of the "Ring of Fire Draft Resource Management Plan and Environmental Impact Statement" prepared by the U.S. Department of the Interior and the Bureau of Land Management. | Please see response to comment 6-2 under NEPA Compliance. |
| 24 - 14 | Thank you for the opportunity to comment on this study; we look forward to working with BLM and the Anchorage Field Office to effectively manage resources within the Matanuska-Susitna Borough. | Please see response to comment 6-2 under NEPA Compliance. BLM appreciates your continued participation in the public process and your commitment to effective management of resources in the southcentral region. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 27 - 2 | We thank you for the opportunity to participate in this process and respectfully submit these comments regarding the Ring of Fire Draft Resource Management Plan and Environmental Impact Statement. | Please see response to comment 6-2 under NEPA Compliance. |
| 27 - 10 | Once again, thank you for the opportunity to participate in this process. | Please see response to comment 6-2 under NEPA Compliance. |
| 28 - 8 | Thank you for the opportunity to review and comment on the Ring of Fire RMP/EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 30 - 1 | We are writing you on behalf of our clients, the Alaska Coalition, Sierra Club, the Wilderness Society, and Campaign for America's Wilderness, to inform BLM of its potential violations of the National Environmental Policy Act in providing inaccurate and misleading information in the Draft Ring of Fire Resource Management Plan and Environmental Impact Statement (RMP/EIS). | BLM is confident that, to the best of our knowledge, the Draft RMP/EIS does not contain inaccurate or misleading information. Additional information will be incorporated and/or changes will be made to the PRMP/FEIS based on public comment in order to reflect the most accurate information and straightforward analysis. |
| 30 - 2 | We are concerned that BLM waited until Wednesday, December 14, 2005, 15 days before the end of the comment period on the draft RMP/EIS, to announce errors in the maps of the Neacola Mountains Area of Critical Environmental Concern (ACEC). Moreover, BLM has not as of yet provided adequate public notice of these errors. Thus, BLM has failed to inform the vast majority of the commenters on the draft RMP/EIS who relied on these maps in drafting their comments that they had done so in error. | BLM apologizes for the error presented in the Draft RMP/EIS, maps, and public meetings. However, immediately upon identification of the error, BLM corrected all information presented to the public. Notification of the correction was sent to those on the mailing list. The letters and posting indicated that BLM extended the comment period 30 days (to January 30, 2006) to allow appropriate time for review of the corrections and invite comments regarding this matter. Throughout this process, BLM has adhered to NEPA guidelines in order to provide adequate notification and time for comment. |

NEPA Compliance

| Comment # | Comment | Response |
|-----------|---|--|
| 30 - 3 | <p>All Neacola Mountains ACEC maps included in the draft Ring of Fire RMP/EIS, provided to the public in outreach mailings, and presented for discussion at associated public hearings clearly identify two large tracts of BLM-administered lands as being included in the proposed ACEC. The sum of these two parcels totals approximately 365,000 acres of unencumbered BLM lands. At its December 14, 2005 public hearing, BLM announced the errors in the maps. Agency staff also recognized that the maps conflict with the text of the draft RMP/EIS, which recommends only 229,000 acres of BLM lands for inclusion in the Neacola Mountains ACEC.</p> <p>Thus, the maps provided to the public by BLM depict 137,000 acres more high value public lands within the proposed ACEC than does the text. As BLM is aware, the vast majority of the public that is commenting on this large, comprehensive federal planning document generally relies heavily upon maps for an analytical, visual synopsis of proposed management decisions. Therefore, the public cannot provide meaningful and substantive comments without accurate maps.</p> <p>Unfortunately, as BLM did not reveal the inaccuracy of the maps until the sixth of the seven public hearings scheduled for this RMP/EIS, most of the public is unaware of the inaccuracy.</p> <p>Such a late disclosure provides insufficient time for the commenting public to perform another analysis of the ACEC proposal, or to revise their comments accordingly. Because BLM failed to provide adequate notice of the inaccuracies or to timely circulate revised maps, we believe that it has not complied with its NEPA mandates. Instead, BLM has allowed the public to rely on misleading, inaccurate information that the agency provided, if accidentally.</p> | Please see response to comment 30-2 under NEPA Compliance. |
| 30 - 4 | Therefore, we believe that that BLM must revise the Neacola Mountains ACEC maps, provide proper public notice of the erroneous maps, and widely distribute the corrected maps to the public. | Please see response to comment 30-2 under NEPA Compliance. |
| 30 - 5 | BLM also should extend the public comment deadline by at least 60 days to provide the public adequate time to analyze and comment upon the new information. If BLM fails to do so, it likely will be found to have violated its NEPA obligations. | Please see response to comment 30-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 32 - 6 | Thank you for reading about our concerns. | Please see response to comment 6-2 under NEPA Compliance. |
| 33 - 1 | The State of Alaska has reviewed the Bureau of Land Management (BLM), Ring of Fire (ROF) Resource Management Plan/Environmental Impact Statement (RMP/EIS). We appreciate the opportunity to offer comments and suggestions in support of the development of this plan pursuant to 43 CFR 1610.3-1. This letter represents the consolidated comments of state agencies. | Please see response to comment 6-2 under NEPA Compliance. |
| 33 - 69 | Thank you for the opportunity to offer comments on the Draft Ring of Fire Resource Management Plan/ EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 34 - 1 | Lynn Canal Conservation (LCC) is a Haines-based conservation organization. When we made Ring of Fire scoping comments in 2004, we nominated Haines Block lands to be included in an Area of Critical Environmental Concern (ACEC) to be managed as a Research Natural Area (RNA). We were truly surprised that there was neither acknowledgement nor evaluation of this nomination in the DEIS. | BLM did consider and evaluate this nomination as an ACEC as required by NEPA (40 CFR 1503.1) but did not assign this designation in the Draft RMP/EIS. The PRMP/FEIS elaborates on this consideration in Section 2.2. |
| 34 - 6 | The DEIS correctly identifies the primary Haines Block scoping issue as the growth of helicopter-based recreation and potential impacts to mountain goats and other wildlife. See DEIS at 1-4. However, the DEIS fails to mention that the Alaska Department of Fish and Game (ADFG) also expressed concerns about this particular issue in this particular area. See June 16, 2004 letter from Polly Hessing to Robert Lloyd. The Scoping Report was supposed to list public and agency "Wildlife and Habitat" comments. Department of Natural Resources "Wildlife and Habitat" comments are included in the Scoping Report, but not ADFG comments. See DEIS Appendix B at 21 and 22. LCC believes that when ADFG expresses concerns about the impacts of helicopter recreation on mountain goat resources in the Haines area, BLM should consider these concerns because BLM relies on ADFG to manage wildlife populations on BLM lands. See DEIS at 1-11. | The Scoping Report presented in Appendix B of the Draft RMP/EIS reflects public and agency scoping that occurred from March 19, 2003 through July 31, 2003. The ADF&G letter you are referring to would not have been included in the Scoping Report because it was not submitted during this timeframe. BLM has considered all substantive comments from ADF&G and other state, local, and federal agencies received during scoping and other specified comment periods. Generally, these comments are addressed in the Scoping Report, Draft RMP/EIS, and/or Comment Analysis Report. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 34 - 7 | A second glaring omission in the DEIS is that there is no mention - in the Scoping Report or elsewhere - that LCC nominated Haines Block lands for an Area of Critical Environmental Concern (ACEC) to be managed as a Research Natural Area (RNA). See DEIS Appendix B at 12. There is also no mention of letters of support for this designation from ADFG, and the Alaska Center for the Environment, Alaska Coalition, Alaska Wildlife Alliance, Defenders of Wildlife, Sierra Club Alaska Chapter, Southeast Alaska Conservation Council, and the Wilderness Society. Not only should our nomination be mentioned in a supplemental EIS, but also considered. | Please see response to comment 34-1 under Special Management Areas. The Draft RMP/EIS has evaluated the comments submitted during scoping, but does not document every nomination. The section dealing with Issues Considered but not Analyzed Further consolidated nominations for WSRs, ONAs, ACECs, and is contained in Section 2.2 of the Proposed RMP/Final EIS. |
| 34 - 36 | Thank you for the opportunity to provide these additional comments. | Please see response to comment 6-2 under NEPA Compliance. |
| 35 - 5 | We appreciate the opportunity to comment on the BLM Ring of Fire RMP/EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 40 - 7 | Thank you for considering these comments. | Thank you, comment acknowledged. |
| 41 - 1 | Thank you for the opportunity to comment on the Ring of Fire DRMP/EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 42 - 6 | We do have concerns about incorrect and confusing information presented in the Draft RMP/EIS, and the potential for adverse impacts to biological, cultural and subsistence resources under the current suite of required operating procedures (ROPs) and lease stipulations, particularly for future management of lands that will be open to mineral and oil and gas exploration and extraction. | Thank you, comment acknowledged. Future proposals will be subject to the NEPA process, the application of the appropriate ROPs and stipulations, and specifically an evaluation pursuant to ANILCA Sec. 810. Also see response to comment 30-1 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 42 - 11 | EPA's review must be based on the Draft RMP/EIS document; however, we also received on December 27 the BLM's letter that corrects the mapping information presented in the Draft RMP/EIS and clarifies the proposed Neacola Mountains ACEC is the single 229,000- acre southern block. The letter also corrects Table 2.4-1, which assigned Visual Resource Management Class III instead of Class II to the proposed ACEC. The letter indicates the BLM has extended the comment period by thirty (30) days (until January 30, 2006) in order to correctly portray the proposed ACEC and allow time for public review of the correction. EPA commends the BLM for its corrective action efforts, and we recommend that the BLM also provide the updated information and corrective action on the agency's external web site, if that has not already been done. | Notification of the correction was sent to those on the mailing list and was posted on the BLM Ring of Fire website. Both the letters and posting indicated that BLM extended the comment period 30 days (to January 30, 2006) to allow appropriate time for review of the corrections and invite comments regarding this matter. BLM appreciates your support of the public process. |
| 42 - 24 | EPA appreciates the opportunity to provide comments on the Draft Ring of Fire RMP and EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 45 - 10 | Thank you for this opportunity to comment. | Please see response to comment 6-2 under NEPA Compliance. |
| 46 - 2 | Thank you for taking the time to read and consider my viewpoints. | Please see response to comment 6-2 under NEPA Compliance. |
| 47 - 6 | Thank you for the opportunity to comment on the BLM Ring of Fire RMP/EIS. | Please see response to comment 6-2 under NEPA Compliance. |
| 48 - 1 | Eklutna, Inc. (Eklutna) has land holdings and substantial other selections within the area that is being considered in the above referenced matter. Eklutna has been asked to comment on this matter. | Please see response to comment 6-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 53 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | Under NEPA (40 CFR 1506.6), BLM is required to make the Draft RMP/EIS and supporting documents available to the public, agencies, and Native tribes for review, with appropriate time for interested parties to provide comments. BLM saw it necessary to extend the comment period in order to provide a thorough review of the Draft RMP/EIS revisions. BLM appreciates your participation in the review process and comment period. |
| 58 - 2 | Thank you very much for this opportunity to express my views. | Please see response to comment 6-2 under NEPA Compliance. |
| 63 - 1 | I appreciate the opportunity to comment as well as your sincere consideration of my comments on this very important matter. | Please see response to comment 6-2 under NEPA Compliance. |
| 66 - 1 | Please take the time to regard my concerns. | Please see response to comment 6-2 under NEPA Compliance. |
| 67 - 1 | Please take the time to regard my concerns. | Please see response to comment 6-2 under NEPA Compliance. |
| 79 - 1 | Thanks for the opportunity to provide input on this process. | Please see response to comment 6-2 under NEPA Compliance. |
| 84 - 1 | I have read portions of the Resource Management Plan for BLM lands in the Haines area and I would like my comments considered in your planning decisions. | Please see response to comment 6-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 85 - 7 | I want BLM to pay as much attention to the Knik River group as it does to the Alaska Outdoor Council or other motorized interests in this regard. | It is a requirement of NEPA (40 CFR 1503) that BLM invite comments from interested parties, as well as consider and address all substantive comments regardless of the commentor's affiliation. Gathering input on the Draft RMP/EIS from potentially affected members of the public and other stakeholders is essential to the preparation of an effective Proposed RMP/Final EIS. |
| 86 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | Under NEPA (40 CFR 1500-1506), BLM is required to make the Draft RMP/EIS and supporting documents available to the public, agencies, and Native entities for review, with appropriate time for interested parties to provide comments. BLM saw it necessary to extend the comment period in order to provide a thorough review of the Draft RMP/EIS revisions. BLM appreciates your participation in the review process and comment period. |
| 87 - 11 | Thank you for the opportunity to make our comments. | Please see response to comment 6-2 under NEPA Compliance. |
| 88 - 6 | Thank you for your considering my comments. | Please see response to comment 6-2 under NEPA Compliance. |
| 89 - 8 | Thank you for your consideration. | Please see response to comment 6-2 under NEPA Compliance. |
| 90 - 5 | Thank you for your considering my comments. | Please see response to comment 6-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 91 - 4 | Thank you for this opportunity to comment on BLM's Ring of Fire management proposals for the Neacola Mountains/Chilligan River area. Please include my comments in your record of public comments on these management proposals. | Please see response to comment 6-2 under NEPA Compliance. Also see response to comment 70-5 under Special Management Areas. |
| 93 - 4 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |
| 94 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |
| 100 - 5 | <p>I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC.</p> <p>I appreciate your sincere consideration of my comments on this most important matter.</p> | See response to comment 53-5 under NEPA Compliance. |
| 101 - 5 | Thanks for the extension of the public comment period, which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 104 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |
| 106 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |
| 107 - 5 | I appreciate the extension of the public comment period which has allowed me additional time to consider the management alternatives presented within the draft Ring of Fire, particularly the alternatives for protecting the proposed Neacola Mountains ACEC. | See response to comment 53-5 under NEPA Compliance. |
| 108 - 1 | I would like to thank you for extending the comment period for the Draft Ring of Fire RMP. | See response to comment 53-5 under NEPA Compliance. |
| 109 - 5 | Thank you for taking my comment. | Please see response to comment 6-2 under NEPA Compliance. |
| 113 - 1 | Thank you for the opportunity to submit comments on the Ring of Fire Draft Resource Management Plan/EIS (DRMP/EIS). | Please see response to comment 6-2 under NEPA Compliance. |
| 113 - 24 | Thank you for your consideration, | Please see response to comment 6-2 under NEPA Compliance. |

NEPA Compliance

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 115 - 1 | Thank you for seeking public comment on the Ring of Fire region; | Please see response to comment 6-2 under NEPA Compliance. |
| 115 - 4 | Thank you for your time and consideration | Please see response to comment 6-2 under NEPA Compliance. |
| 119 - 2 | We thank you for the opportunity to actively participate in this resource planning process and assist BLM in tailoring the plan objectives to meet the best interests of the natural resources, wildlife habitat, and all users of these 1.3 million acres of public lands. | Please see response to comment 6-2 under NEPA Compliance. |
| 119 - 15 | We are concerned, however, that BLM may have complicated, and possibly discouraged, public comment on this issue by publishing misleading information about the proposed acreage of the Neacola Mountains ACEC. Although the error likely was inadvertent, the text of the Draft RMP/EIS and the graphic representation of the proposal displayed in Figure 2.3-3 provided conflicting acreages for the ACEC. Although we commend BLM for correcting the record and extending the comment period, the burden on the average citizen of preparing a second set of comments may have been too great. Moreover, we were disappointed to see that BLM chose the smaller of the two acreages for inclusion in the proposed Neacola Mountains ACEC. | Please see response to comment 30-2 under NEPA Compliance. Also see response to comment 53-2 in Special Management Areas. |
| 119 - 53 | We are disappointed that the Draft RMP/EIS fails to mention or consider the scoping nomination of the Lynn Canal Conservation (LCC), which our organizations also supported, for the designation of BLM-managed lands in the Haines Area as an ACEC to be managed as an RNA. | Please see response to comment 34-1 under NEPA Compliance. |

NEPA Compliance

| Comment # | Comment | Response |
|-----------|---|--|
| 119 - 85 | Moreover, BLM failed to account for, or fully explore, mitigation measures, as it was required to do pursuant to the Council on Environmental Quality guidance governing environmental impact statements, 40 C.F.R. § 1502.14 (EIS must include appropriate mitigation measures not already included in proposed action or alternatives). BLM should re-evaluate and provide analysis of alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes, and provide adequate foundation for its analysis. | A detailed set of mitigation measures is examined in Appendix D, including 103 proposed required operating procedures (ROPs) and eight lease stipulations. These specific and feasible mitigation measures represent the result of BLM experience in land use management in Alaska and nationally. The Draft RMP/EIS examined a set of alternatives developed to address issues identified in the scoping process. Some issues were not appropriate for review in the plan (see Chapter 1), and these were not incorporated into alternatives. The current range of alternatives constitutes an analytically sound effort to identify contrasting management approaches to development activity, with some alternatives reducing or eliminating some uses. |
| 119 - 98 | <p>BLM failed to analyze mitigation measures — NEPA requires an agency to describe and analyze the effectiveness of proposed mitigation measures. See 40 C.F.R. § 1502.16(h) (EIS “shall include discussions of . . . means to mitigate adverse environmental impacts”). “The requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of the Act and, more expressly, from CEQ’s implementing regulations.” <i>Robertson v. Methow Valley Citizens Council</i>, 490 U.S. 332, 351 (1989). “Mitigation must ‘be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.’” <i>Neighbors of Cuddy Mountain v. United States Forest Serv.</i>, 137 F.3d 1372, 1380 (9th Cir. 1998) (citing <i>Carmel-By-the-Sea v. U.S. Dep’t of Transp.</i>, 123 F.3d 1142, 1154 (9th Cir. 1997)). Here, BLM failed to provide any analysis of the mitigation provided by the proposed stipulations and ROPs.</p> <p>In its analysis of environmental affects, for each resource BLM merely stated that activities will be subject to stipulations and ROPs. See, e.g., Draft RMP/EIS at 4-18 (“All mineral development would be subject to ROPs and stipulations”). BLM failed to identify the most relevant mitigation measures. Nowhere did BLM attempt to analyze the effectiveness of the stipulations and ROPs or explain how they were developed.</p> | Please see responses to comments 119-95 under ROPs and Stipulations and 119-85 under NEPA Compliance. |
| 119 - 100 | BLM Should Clarify Whether it Will Rely on RMP/EIS for Future Decisions — BLM must provide the public with opportunities to provide analysis and input on any proposals for future resource development, or other activities that may damage resources or resource values in the planning area. This includes review of draft documents, such as Environmental Assessments. | Agreed. It is a requirement of NEPA (40 CFR 1503 and 1506) that BLM provide the public with opportunities to review and comment on NEPA documents, such as an EIS or EA. |

End of section on NEPA Compliance

Off-Highway Vehicles

| Comment # | Comment | Response |
|-----------|--|---|
| 3 - 2 | <p>There are approximately 100 million acres of wild and national parks and 57 million acres of wilderness areas, all set aside for those people who can't stand to listen to the sound of motor vehicles.</p> <p>And with all those millions of acres in Alaska set aside for those people, they got to take this little bit of area in the Knik River Valley, which is mostly mud and sand and gravel bars, and try to restrict it and keep people out of there because they hate four-wheelers.</p> | <p>Thank you for your comment. The Knik River Area is very accessible for many Alaskans because of its proximity to several highly populated communities. BLM recognizes this accessibility and how all types of recreationists are attracted to the area because of it. BLM proposes the establishment of the Knik River SRMA under Alternatives C and D to provide the framework for additional implementation-level planning that will maintain a diversity of recreation opportunities in the area.</p> |
| 4 - 2 | <p>They ride their ATVs -- and Don Irwin who was the head of the colonist colony in '35 wrote a book in 1965 and he majored in agriculture and agronomy. And agronomy is erosion. And he stated that with the winds on the Knik and the Matanuska River, if you destroy the vegetation, you are going to have complete erosion. And that is what is happening over there.</p> | <p>The Draft RMP/EIS recognizes the impacts to natural resources from unregulated OHV use (see Chapter 4). Such documented resource impacts, combined with the need to continue to provide for a diversity of recreational experiences, drive the OHV proposals described in the Preferred Alternative (D) and Alternative C. These proposals include designating a majority of BLM-managed lands as limited to OHVs, with site-specific limitations to be determined in implementation level planning.</p> |
| 9 - 2 | <p>I'm not around very much, but I can recount a half a dozen times I had bullets slinging by me within 50 feet. I had a bullet hit my metal shop one time, it makes a lot of noise. I had a bullet hit a swing set when I and my two youngest children were out on the trampoline, 20 feet from it.</p> <p>And it's pretty disheartening to tell a little boy when he looks at you and say, dad, was that a bullet? And what do you say? Yes, it was. And then to have kids say, oh, it's okay to the others kids. That's a shotgun. Those bullets can't come over here. Or to be woken up at -- going to bed at 11:00 to be woken up at midnight by a high-powered rifle on a foggy night. It's pretty unnerving. It wakes you up just like that. It's hard for this guy to get back to sleep.</p> | <p>BLM is concerned about the public safety issues in the Knik River Valley and is committed to working with adjacent landowners during the implementation level planning process to come to management solutions regarding this issue.</p> |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 11 - 4 | I'd really like to see nonmotorized upland and wetland routes through the area, which would be available for nonmotorized users. I'd like to see motorized use be limited to designated trails, not just simply existing trails because I think that the current situation out there has been fairly out of control. There is a number of trails that are not appropriate that do go into wetland areas and other areas that I'm not aware of in addition to that. And so I think that there needs to be a look at closing some of the existing trails and not grandfathering those in. | <p>BLM recognizes the non-motorized use of the Knik River Valley, and has assigned the "limited" OHV classification to the area. We intend to further define the management of the Knik area through the development of an implementation plan, which will incorporate the goals (stated in Appendix F of the Proposed RMP/Final EIS) for the Knik River SRMA. BLM is committed to working with all of the interested parties as part of its planning process.</p> <p>BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for the Knik River SRMA determine that there are areas which should be managed to allow additional OHV use.</p> |
| 12 - 4 | And I'd just like to set the record straight that ACE is not opposed to OHV use in this area. We do believe that it is an appropriate use for certain parts of the Knik watershed. Ideally, we would like to see closures, though, to heavily damaged areas and also close attention paid to critical habitat areas within the watershed. Since many of the upland/wetland areas are springfed with open water year-round, seasonal closures I don't think would be effective, especially during times of breakup and the spring melt. We also have some reservations of the grandfathering in of existing OHV trails. The BLM should be careful to allow OHV use on all current trails, for some trails may not be suitable for the planning area. | <p>BLM is committed to working with interested parties during implementation level planning in order to determine site-specific actions, impacts, designations, and mitigation measures associated with motorized and non-motorized activities. BLM has committed to completing specific implementation level planning in the next five years. BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for the area determine that there are areas which should be managed to allow additional OHV use.</p> |
| 14 - 3 | With that said, commenting on the preferred alternative, Alternative D, it makes a lot of sense, and I commend what you folks have done in sort of embracing the idea of the State's generally allowed uses for off highway vehicles. I think that that's a great step in the right direction, especially considering that so many of these lands are adjacent to State lands. And just the management of what you can do when you cross an imaginary boundary would be hard to keep track of. | Thank you, comment acknowledged. |
| 14 - 4 | Most of the people that are members of the alliance are motorized users that do feel that the State's generally allowed uses are appropriate and a decent way of managing that resource. And so embracing that idea and classifying the lands as limited and mentioning the State's generally allowed uses make us more comfortable than not. | Thank you, comment acknowledged. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 14 - 5 | One thing I'd like to point out about the generally allowed uses, however, is that technically it's not just existing trails. It's -- the generally allowed uses are slightly more liberal than that in what you can do. In other words, it wouldn't be a matter of classifying the trails in terms of -- inventorying the trails in terms of the way the State manages that. It would be more of a matter of using an existing trail where you can. In fact, in the statute it says use existing trails when possible. It puts limitations on what can happen on the off-trail usage. For instance, it would be illegal to tear up the vegetative mat. And I would like to stress that the preferred alternative should fully embrace that idea. | Limitations within the ACEC and two SRMAs would be defined through development of implementation plans. For all other BLM-managed lands, the Proposed Action limits OHV use to existing roads and trails and is the same as The Generally Allowed Uses on State Land, which among other things, requires OHVs to stay on existing trails and prohibits alteration of drainage systems, significant rutting, and ground disturbance. |
| 16 - 5 | Snowmobile Impacts – Tourism and Local Recreation The same or similar methodologies used in evaluating helicopter impacts on wildlife need to be applied to snowmobile impacts on sensitive species. | Snowmachines are considered to be an OHV for the purpose of the analysis in the Proposed RMP/EIS (see Section 3.3.10). BLM evaluated the effects of OHVs on wildlife for all alternatives in Section 4.3.1.5 and 4.4.3.4, which includes BLM sensitive species. In addition, Section 4.3.1.5.1 of the Proposed RMP/Final EIS identifies four specific management objectives are common to all proposed alternatives. These objectives acknowledge the special status and management needs of BLM sensitive species. |
| 17 - 11 | AQRC recommends that BLM designates its lands within the proposed special management units as "limited" without reference to the state's policy. In that way, BLM would have much more flexibility in managing OHV activity in the interim. For example, it could post its lands and require OHVs to stay on roads and trails, without exception. | The Preferred Alternative (D) is the "limited" OHV classification for BLM-managed lands (including all SMAs). We intend to further define the management of the proposed SMAs through development of implementation plans which incorporate the goals stated in Appendix F. |
| 17 - 12 | We note that the Plan does make special provisions for snowmachining (e.g., see page 3-165). In accordance with the "Conditions for Generally Allowed Uses", which modifies the more general statement of policy contained in "Travel Across State Land", snowmachines under this Plan must stay on trails and roads whenever possible. AQRC doubts the snowmachine community agrees with this stance or that this is BLM's intent. | The Proposed RMP/Final EIS does not make special provisions for snowmachining. As discussed on pages 3-165 of the Draft RMP/EIS, BLM is required to provide "reasonable access to subsistence resources on public lands" under Section 811 of ANILCA. This allows for "appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulation." Limiting snowmachines to designated trails could change based on public involvement and comment during implementation level planning. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 18 - 4 | ORVs should be allowed only on routes approved BLM where it is clear ORVs will not cause deterioration of the habitat. | Please see response to comment 4-2 under Off-Highway Vehicles. |
| 19 - 4 | We ask BLM to include the SRMA in the final RMP, with management prescriptions that will protect the wildlife and fish habitat there from over-use and inappropriate use by off-highway vehicles. | Please see response to comment 4-2 under Off-Highway Vehicles. |
| 19 - 5 | If you do not gain control of OHV traffic and direct it to routes where it will do no harm to the resource, it will soon get away from you and cause real damage. | BLM intends to emphasize educating the public on the benefits of using existing trails, but BLM will also enforce adherence to OHV use restrictions where deliberate OHV use off of existing trails is causing resource damage. See response to comment 4-2 under Off-Highway Vehicles. |
| 22 - 5 | ORV traffic is invading these wetlands from all sides, including from the adjacent BLM lands, particularly the Friday Creek trails area. Friday Cr. has changed channels in the past few years -roughly 70% of it now flowing directly into the wetlands. Friday Creek is chock full of salmon and has fragile banks currently with no protection (we already have an example of a lost anadromous stream - still listed in the ADF&G catalog -in the watershed). | <p>See response to comment 4-2 under Off-Highway Vehicles. The Proposed Action delineates travel management for off-highway vehicle use as "Limited". This delineation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001). Implementation of Limited use area designations for OHVs would be effective immediately after signature of the decision record.</p> <p>Additional or site-specific Travel Management Planning will be addressed and implemented within implementation level plans, such as ACEC or Special Recreation Area Management plans, which are produced after the PRMP/FEIS is approved. Through the development of activity-level plans, produced with public involvement, resources may receive further levels of necessary protection from vehicle use.</p> <p>It is not practical to define within the Ring of Fire PRMP/FEIS a specific date or timetable of when future implementation level plans would be processed. Per BLM policy, this work normally should be completed within 5 years of the signing of the ROD (BLM Land Use Planning Handbook - 1601, Comprehensive Trails & Travel Management, 3/11/06).</p> |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 22 - 6 | ORV's tend to follow water flows -in the early 80's I witnessed in dismay as unthinking ORV operators completely destroyed an extremely large beaver dam at Wolf Point (BLM land) by using it as a causeway. | Please see response to comment 4-2 under Off-Highway Vehicles. |
| 22 - 7 | Ad hoc motorized traffic is threatening to completely encircle the wetlands via the Rippy Tr. and, at the same time invade the extremely narrow wildlife corridor/transitional zone between the rocks and wetlands, is accessible from Friday Creek on BLM lands. Feeder springs that remain open all year around abound, many already in ugly messes. | Please see response to comment 4-2 under Off-Highway Vehicles. |
| 22 - 8 | (Special consideration for the waterways, such as horsepower limits are overdue.) | Thank you for your comment; however, BLM has no authority to set horsepower limitations on waterways. |
| 22 - 9 | Many branch trails penetrate right into the vegetative mat and into documented waterfowl, fish and moose habitat. BLM is in a position to help turn around the rapid degradation in the entire watershed by virtue of applying sensible and legal management to their portion. | Sections 3.3.10.1 and 4.3 in the Proposed RMP/Final EIS acknowledges that trail braiding is occurring and that OHV use has impacted multiple resources within the planning area to varying degrees. The documented resource impacts drive BLM's proposal to change trail and OHV management from the status quo to a more proactive role. These proposed changes are discussed and analyzed under Alternatives C and D in the Proposed RMP/Final EIS. The Proposed Action delineates travel management for off-highway vehicle use as "limited." This delineation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001). Implementation of limited use area designations for OHVs would be effective immediately after signature of the decision record. The documented resource impacts that are occurring drive the need for BLM to propose changing OHV management from the status quo to a more proactive role in trail and OHV management. These proposed changes are discussed and analyzed under the Proposed Action and Alternative C in the PRMP/FEIS. |

Off-Highway Vehicles

| Comment # | Comment | Response |
|-----------|--|---|
| 25 - 5 | Weight restrictions should not be implemented on the RS 2477 trail or any other existing trail that exists in this area. People retrieving game should not be restricted to the trail system. Restrictions on the trails leads to wanton waste of game animals. | The Proposed Action and Alternative C would consider weight restrictions in specific travel management areas during implementation level planning. This process will determine specific designated trails or restrictions, and will consider the allowance of off-trail use for game retrieval, etc. BLM also intends to use education to inform the public about the benefits of using existing trails as well as the penalties associated with traveling off-trail and causing resource damage. |
| 29 - 2 | We applaud and support BLM's effort to bring their "Limited" designation in-line with the State's "Generally Allowed Uses on State Land" policy. However, in the Ring of Fire RMP draft the definition of "Limited" is often stated as simply "existing trails". In the Alaska Administrative code AAC 96.025, the Alaska State law states "vehicles must use existing roads and trails whenever possible". There are no stipulations defined for legitimate reasons for leaving the trail, only that an existing trail must be used when possible. Where the BLM documentation suggests reasons for leaving the trail, such as noted in section 2.3.5, "If necessary (e.g. game retrieval)", we're concerned this may result in a closed list of acceptable reasons for leaving the trail. We request the document be modified to make it clear that those are only examples and that a specific list of approved reasons for leaving the trail is neither defined nor necessary. In other words, it should be legal to be off the trail when it's not possible to stay on an existing trail regardless of the purpose or destination. All other State limitations for off-trail use should also apply to protect the vegetation. This consistency with State law is especially important considering the high percentage of Ring of fire lands that are planned to be conveyed to the state. | You are correct that the "limited" designation is in-line with the State's "Generally Allowed Uses" policy. Both encourage OHVs to use existing roads and trails whenever possible. The "Generally Allowed Uses" are written to allow cross-country travel when there is not an established trail, and that when doing so, care is taken not to disturb the vegetative mat. The key is that travel off of existing routes must minimize "disturbance of vegetation, soil stability, or drainage systems; changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, water holes, seeps, and marshes; and disturbance of fish and wildlife resources." (11 AAC 96.025). It is BLM's intent to conduct implementation-level planning in travel management areas within the next five years, which will determine specific designated trails or restrictions, and will consider the allowance of off-trail use for game retrieval, etc. BLM also intends to use education to inform the public about the benefits of using existing trails as well as the penalties associated with traveling off-trail and causing resource damage. |
| 29 - 7 | We are pleased with the draft RMP where any OHV limitations are defined to be consistent with the State's "Generally Allowed Uses on State Land". This seems to be the default OHV designation for the Ring of Fire areas. | Thank you, comment acknowledged. |
| 31 - 5 | We also believe that any regulations included in the upcoming "Ring of Fire" should be in accordance with the State of Alaska "Generally Allowed Uses" of public land. We believe that the generally allowed uses are appropriate, reasonable, and compatible with most users of public land and with "traditional uses" of land in the Butte area. | Thank you, comment acknowledged. This is the current approach in the PRMP/FEIS. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 31 - 7 | Millions of acres of Alaska lands have been designated as National Parks, Wilderness, Wildlife Refuges, State Parks, etc. Most of these land areas are designated as "non- motorized". We feel that enough has been set aside for those who want a non-motorized "wilderness" experience, and we need our own relatively small area designated for off road motorized use. | Please see response to comment 3-2 under Off-Highway Vehicles. |
| 32 - 2 | Our main concern is that this area is being overrun with uncontrolled, careless and destructive use by Off Road Vehicles (ORV) and reckless, destructive shooting. This excessive ORV use is pushing new trails into wildlife nesting grounds, impacting wild life and swans, driving them off their traditional nesting grounds. This includes fireworks, shooting and the use of large air boats as well as ORV's. | <p>The Proposed RMP/Final EIS recognizes the impacts to natural resources from unregulated OHV use (Chapter 4). Such documented resource impacts, combined with the need to continue to provide for a diversity of recreational experiences, drive the OHV proposals described in the Proposed Action (D) and Alternative C. These proposals include designating a majority of BLM-managed lands as limited to OHVs, with site-specific limitations to be determined in implementation level planning.</p> <p>Please also see responses to comments 4-2 and 9-2 under Off-Highway Vehicles.</p> |
| 33 - 22 | We recommend the Bureau consider access needs for subsistence uses other than hunting when developing an implementation-level plan for off-highway vehicles. | Thank you for your comment. BLM will consider access needs relative to all subsistence uses during implementation-level planning. |
| 33 - 45 | <p>4.3.1.3.1 Direct and Indirect Effects Common to All. Alternatives for Water Resources Page 4-21, and 4-49, Off-highway Vehicle Effects on Vegetation and others.</p> <p>We recommend the Bureau cite actual studies that document off-highway vehicle damage to vegetation instead of an advocacy report on off-highway vehicle damage. There are many studies in peer-reviewed academic journals that document off-highway vehicle damage to vegetation.</p> | Additional references that document OHV damage to vegetation have been added to Sections 4.3.1.3.1 and 4.3.1.6.2 in the Proposed RMP/Final EIS. |
| 39 - 3 | If the BLM wishes to co-operate with the Knik recreational ORV sacrifice zone, at least there should be a mandatory pressure wash of dirty vehicles and trailers before and after use to prevent parasite transfer between watersheds that is facilitated by mud transfer. | Thank you for your comment; however, BLM believes this requirement would not be practicable. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 42 - 14 | Like the BLM, we are very concerned about the threats to public safety and the ongoing environmental degradation in the Knik River Flats area, largely due to uncontrolled high OHV use. | Please see responses to comments 4-2 and 9-2 under Off-Highway Vehicles. |
| 54 - 8 | The lack of trail inventory and assessment on BLM lands requires a more conservative approach than the “generally allowed uses on state land” on “existing roads and trails” that is proposed. The current level and quality of ORV use in this area is not sustainable and is causing substantial degradation of fish, wildlife and recreational resources. | BLM agrees that accurate and up-to-date trail assessment and inventory is necessary before trail designation can occur. Additionally, the PRMP/FEIS recognizes the impacts to natural resources from unregulated OHV use (see Chapter 4). Such documented resource impacts, combined with the need to continue to provide for a diversity of recreational experiences, drive the OHV proposals described in the Proposed Action and Alternative C. These proposals include designating a majority of BLM-managed lands as limited to OHVs, with site-specific limitations to be determined in implementation level planning. |
| 54 - 9 | We ask the BLM to inventory, analyze and assess current ORV use, and designate specific trails for ORV access that will not degrade resources. This would involve closing all lands to ORV use except for designated, posted trails. | See response to comment 54-8 under Off-Highway Vehicles. |
| 72 - 3 | OHV use should be limited to vehicles less than 1000 lb. | On 17(b) easements, there is currently a 3,000 pound GVW limit for OHVs on 25-foot wide trail easements. It is the intent of BLM under implementation-level considerations to apply weight limits to some specific trails. These will be determined based on other factors such as resource considerations or maintenance of recreation experiences. Consultation will take place with Native corporations, other land managers and the public. |
| 79 - 3 | OHV Use- My specific comments on OHV use are based upon my experiences with the impacts from such activities. While there is a portion of the community that wishes to recreate in such a manner, I find it difficult to legitimize any expansion in this regard due to the myriad impacts from such activities, and would strongly counsel for Alternative C in this regard. | Please see response to comment 4-2 under Off-Highway Vehicles. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 85 - 9 | However, I am deeply concerned that should the pending state legislation be enacted, the primary goal of which is to create a public use area for ATVs, BLM will end up creating and managing this SRMA for that same purpose in accordance with its general policy of managing its lands in a fashion comparable to neighboring landowners. This would be intolerable in light of the fact that many folks in the area have used the area for nonmotorized recreation and want to continue to have such opportunities and, moreover, BLM has the legal responsibility to manage its lands to accommodate all users. | <p>BLM is committed to involving all interested parties in the planning process including the neighboring landowners, as well as communities, recreationists, and conservation groups. BLM is required by FLPMA to manage public lands for multiple uses, and the Proposed RMP/Final EIS intends to provide the guidance to uphold this mandate. Through implementation level activities and planning, BLM will manage to maintain a range of recreation opportunities, for both motorized and non-motorized users, in addition to working with all of the interested parties in an effort to minimize user conflicts.</p> <p>Please also see response to comment 11-4 under Off-Highway Vehicles.</p> |
| 85 - 10 | I also believe designation of the area as a SRMA and providing a balance between motorized and nonmotorized opportunities would provide an excellent case study to examine how the RAC, or its OHV subgroup, could work cooperatively with BLM on issues on resource management. | Please see response to comment 85-9 under Off-Highway Vehicles. |
| 85 - 12 | Finally, I wish to object to BLM's adoption of the state's "Generally Allowed Uses on State Lands" as its definition of "limited". The major objection is that the evidence on the ground, massive trail proliferation, indicates that the state's policy does not work on general state lands. | Please see response to comment 17-8 under Coordination and Compatibility. |
| 85 - 14 | I recommend that BLM adopt the policy in question without the "whenever possible" phrase for the special use areas in which subsequent OHV implementation planning will occur. That would limit OHV use to trails in existence on the date the ROD is signed, would signal to the public that BLM does intend to manage OHV activity on the lands it manages and would provide a level of protection until implementation planning for that area has been completed. | Thank you for your comment; however, BLM recognizes the State's definition of limited, which restricts OHV use to existing roads and trails whenever possible. Currently there are no OHV use designations on BLM-managed lands within the planning area (Table 2.3-4 of the Proposed RMP/Final EIS). A more conservative approach to OHV management is proposed under Alternatives C and D, where OHV use in all areas within the planning area would be designated as "limited" use areas. Implementation of limited use area designations for OHVs would be effective immediately after signature of the decision record. Additional or site-specific Travel Management Planning will be addressed within implementation-level plans, such as ACEC or Special Recreation Area Management plans, which are produced after the Proposed RMP/Final EIS, and include public involvement. |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 87 - 4 | Please review the attached maps for the general locations of these activities within Lake George National Natural Landmark. Damage we observed include: Erosion to stream banks and the dunes due to excessive tearing up of the vegetation by ORVs and 4x4s, and the uncontrolled cutting and subsequent burning of trees near the high water mark. Many of these trees have been feeled with bullets. Springs above the wetlands have been destroyed by ORVs The "vegetative mat" in the wetlands has been criss-crossed and gouged by ORVs, airboats and 4x4s. | BLM acknowledges the damages in this area. Consistent with its OHV management objectives, BLM will ensure protection of natural resources from OHV impacts through various means such as trail inventory and monitoring and use of existing trails whenever possible (see 2.3.5 of Proposed RMP/Final EIS). Specific operating procedures related to OHVs can be found in the ROPs in Appendix D. Also, designation of the proposed Knik River SRMA (see Table 2.3-4 of the Proposed RMP/Final EIS for a comparison of alternatives relative to OHVs) would have beneficial effects on erosion and sedimentation in the Knik area. Please also see response to comment 4-2 under Off-Highway Vehicles. |
| 87 - 5 | Anadromous streams feeding into the wetlands have been diverted or closed off by ORVs. | BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets and trail designations to mitigate damage to sensitive areas. |
| 87 - 8 | The Alaska Department of Natural Resources has continued to issue general "Public Use Permits" for crossing anadromous streams such as Bodenburg, Jim and Friday Creeks. These permits are being abused, as ORV riders consider particularly Bodenburg and Jim Creek as a particular attraction in their motocross recreation. Residents' concerns in the past regarding these permits have not received a response. | While BLM has no authority over permits issued by ADNRR, we share your concern regarding intensive recreation use in the Knik River area, including on lands managed by BLM. Also refer to comment 22-13 under Recreation, regarding development of implementation plans for this area. |
| 87 - 9 | Two roads (trails) have been added to provide unrestricted access on the north side of Knik River into the wetlands leading to Lake George National Natural Landmark: Jim Creek Trail in 1984/85 and Maud Road Extension to Jim Lake in the early 1990s without providing any management. | Thank you for your comment. Neither of these trails are located on BLM lands in the Knik River area. |
| 110 - 8 | We ask the BLM to inventory, analyze and assess current ORV use, and designate specific trails for ORV access that will not degrade resources. This would involve closing all lands to ORV use except for designated, posted trails. | As stated in Section 3.3.10.2 Proposed RMP/Final EIS, "Current AFO management practice includes inventory and documentation of OHV trail development and interim management until OHV use classifications are implemented." Also, as discussed in response to comment 22-9 under Off-Highway Vehicles, the preferred decision for all areas within this plan is to delineate travel management for off-highway vehicle use as "limited." This delineation will limit use to existing roads and trails. |

Off-Highway Vehicles

| Comment # | Comment | Response |
|-----------|---|--|
| 112 - 2 | We applaud and support BLM's effort to bring their "Limited" designation in-line with the State's "Generally Allowed Uses on State Land" policy. However, in the Ring of Fire RMP draft the definition of "Limited" is often stated as simply "existing trails". In the Alaska Administrative code AAC 96.025, the Alaska State law states "vehicles must use existing roads and trails whenever possible". There are no stipulations defined for legitimate reasons for leaving the trail, only that an existing trail must be used when possible. Where the BLM documentation suggests reasons for leaving the trail, such as noted in section 2.3.5, "If necessary (e.g. game retrieval)", we're concerned this may result in a closed list of acceptable reasons for leaving the trail. We request the document be modified to make it clear that those are only examples and that a specific list of approved reasons for leaving the trail is neither defined nor necessary. In other words, it should be legal to be off the trail when it's not possible to stay on an existing trail regardless of the purpose or destination. | See response to comment 29-2 in Off-Highway Vehicles. |
| 112 - 3 | All other State limitations for off-trail use should also apply to protect the vegetation. This consistency with State law is especially important considering the high percentage of Ring of Fire lands that are planned to be conveyed to the state. | Thank you for your comment. As discussed in Section 1.6 of the Proposed RMP/Final EIS, "BLM planning regulations require that BLM plans be consistent with officially approved or adopted resource-related plans of other federal, state, local, and tribal governments to the extent those plans are consistent with federal laws and regulations applicable to public lands." In assessing and manages areas, BLM can, if necessary, use seasonal closures, offsets, and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for an area, determine that the area should be managed to allow additional OHV use. |
| 112 - 9 | We also do not support the general notion that when one user group claims to be negatively impacted by another user group, the later group should be restricted. | BLM agrees. When determining use restrictions or designations, BLM makes a great effort to look at current and potential impacts to resources and users of an area objectively. |

Off-Highway Vehicles

| Comment # | Comment | Response |
|-----------|---|--|
| 119 - 37 | <p>While BLM acknowledged that it must protect natural resources from off-highway vehicle (OHV) impacts, the Draft RMP/EIS did not ensure that BLM will do so. To fulfill its mandate, BLM shall designate all public lands as open, limited, or closed to OHV use "based on the protection of the resources of the public lands." 43 C.F.R. § 8342.1. BLM also must monitor the effects of OHV use as part of its ongoing duty to evaluate the appropriateness of these designations. 43 C.F.R. § 8342.3. If this monitoring reveals that OHVs "are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources," BLM must immediately close these areas to OHV use. 43 C.F.R. § 8341.2. See also Executive Order 11989.</p> <p>In the Draft RMP/EIS, BLM conceded that many of the units in the Ring of Fire planning area are "rarely visited by BLM personnel" and "[c]ompliance checks for permitted actions often do not occur." Draft RMP/EIS at 3-166. BLM nonetheless proposed to designate many of these areas open or limited to OHV use without a definite monitoring and enforcement plan. Without such a plan, BLM cannot adhere to its duty to protect resources from OHV impacts.</p> | <p>BLM takes its duty to protect resources from excessive OHV impacts seriously, but limited enforcement funding and personnel are a reality. BLM intends to emphasize educating the public on the benefits of using existing trails, but BLM will also enforce adherence to OHV use restrictions where deliberate OHV use off of existing trails is causing resource damage.</p> |
| 119 - 39 | <p>We encourage BLM to set the precedent for pro-active management of OHV use and mitigation of current and future impacts throughout the planning area. The State of Alaska's Generally Allowed Uses (11 AAC 96.025) should absolutely not be the only means by which BLM administered lands are managed, even if they are selected for conveyance to the State. The widespread proliferation of OHV trails and associated resource degradation on State lands is evidence that the State's policy to limit OHVs to existing trails "whenever possible" is simply not an effective management strategy.</p> | <p>The Proposed Action (D) for all areas within this plan is to delineate travel management for OHV use as "Limited". This designation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001); and provide numerous options for management, based on site-specific trail inventory and assessment and public input during implementation-level planning within the next five years. It is important to note that the BLM does not adopt the State's statute, but adopts policy consistent with the statute. It is the BLM's intent, on State-selected lands, to emphasize education regarding the policy and the benefits of using existing trails, but also to enforce where deliberate OHV use off of existing trails is causing resource damage.</p> |
| 119 - 41 | <p>Regardless of which draft alternative is ultimately selected, trails signage, public education efforts, and OHV impact mitigation measures should be implemented immediately, especially within eligible Wild & Scenic River corridors, sensitive wildlife habitats, non-motorized use areas, and all other special management areas discussed within this document.</p> | <p>Site-specific actions, impacts, designations, and mitigation measures regarding motorized and non-motorized activities on BLM-managed lands will be addressed in implementation level planning for Special Management Areas. BLM has committed to completing specific implementation level planning in the next five years.</p> |

Off-Highway Vehicles

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|---|---|---|
| 119 - 43 | Executive Order 11644, which sets forth general federal policy regarding OHVs on public lands, directs federal agencies 'to minimize conflict' among the motorized OHV users and various other users of the lands. In respect for the BLM's multiple use mandate, we appeal to BLM to fulfill its responsibility to the non-motorized users of the public lands within the planning area. | Please see response to comment 85-9 under Off-Highway Vehicles. |
| 119 - 47 | Ideally, in the Knik River SRMA, we would like to see BLM close sensitive areas heavily damaged by motorized use and protect critical habitat areas. Seasonal closures would not be effective, especially during the time of Spring break-up, because many of the upland, wetland areas are spring fed, with open water year round. | Please see response to comment 11-4 under Off-Highway Vehicles. |
| 119 - 48 | We also have reservations about BLM's proposed "grandfathering" of existing OHV trails in the area. | Thank you, comment acknowledged. |
| 119 - 49 | BLM should use caution when allowing OHV use on all current trails, for some trails located in salmon spawning streams already show severe rutting, braiding and damage from OHVs. | Please see response to comment 4-2 under Off-Highway Vehicles. |
| <i>End of section on Off-Highway Vehicles</i> | | |

Recreation

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 16 - 11 | Commercial jet boat tours are damaging to anadromous fish and should be prohibited. | Thank you, comment acknowledged. |
| 22 - 13 | 3. I would like to take some issue with the 'recreational classes' example in the plan using the Knik area as 'semi-primitive motorized' because the usage level does easily exceed 'moderate' and is definitely accessible to 'most full sized street four wheel drive vehicles' -any and many four wheel drive vehicles do access the upper valley and your lands. On a busy weekend, hundreds of users access BLM property by all means of transportation, up to and including military convoys practicing stream fords in anadromous streams. | BLM shares your concern regarding intensive recreation use in the Knik River area. While we believe that the Recreation Opportunity Spectrum is a useful management tool, it does have its limitations. With its divergent uses, the Knik River area is difficult to classify. However, we believe that the semi-primitive motorized classification best describes the setting. As implementation plans are developed for the area, seasonal closures, trail designations, or other management techniques could be considered to assist BLM to meet management objectives. BLM is committed to work with all interested parties in developing the implementation plan for this area. |
| 25 - 6 | Target shooting is a problem in this area. An established target range located in the public use area, such as the dunes, or the area between Mud Lake and Jim Lake on Maud Road would be an ideal shooting area. Time restrictions for target shooting should be considered for the residents of the adjoining area. | BLM shares your concern regarding shooting in the Knik River area. An implementation plan would be developed for the proposed Special Recreation Management Area. Designated shooting ranges or other management techniques could be considered to assist BLM to meet management objectives. BLM is committed to work with all interested parties in developing the implementation plan for this area. |
| 28 - 17 | WHEREAS, oil and gas leasing and development and mineral location is incompatible with public recreation and enjoyment of Refuge lands; | Thank you, comment acknowledged. However, BLM is a multiple-use agency and as such, is tasked with considering a variety of proposal on public lands. Site specific mitigation can be accomplished through the application of the NEPA process and through the assignment of ROPS and stipulations, as well as abiding by all federal and state laws and regulations. BLM is currently pursuing transfer of the lands in the Palmer Hay Flats State Game Refuge to the State of Alaska. |

Recreation

| Comment # | Comment | Response |
|-----------|--|---|
| 34 - 15 | <p>Planning Process Step 4 – Analysis of the Management Situation</p> <p>The intent of analyzing the current management situation is to identify "problems and concerns resulting from the current management, and identify] opportunities to manage these lands differently." See DEIS at 1-10, emphasis added. Since 2002, BLM created and maintained a M&C Area, and allowed increasing levels of helicopter-supported recreation elsewhere in the Haines Block. That is, in addition to the on-going summer helicopter glacier tours and dog sledding based out of Skagway, 5-year heli-skiing permits were issued to two companies in 2002, and a new 5-year heli-hiking permit was issued in 2005. BLM anticipates significant future increases in the next five years. See DEIS at 4-9. Therefore, keeping the existing M&C Area and creating a Special Recreation Management Area (SRMA) to manage for increasing helicopter-supported recreational use is really just continuing current management practices without resolving the problems and concerns relating to existing and increasing recreational use levels, and without identifying any opportunities to manage these lands differently.</p> | <p>An implementation plan would be developed for the SRMA (see Appendix F for specific goals and objectives outlined for the Haines Block SRMA). BLM would work with all interested parties to identify a range of alternatives for management and to develop specific decisions regarding commercial recreation use limits (including helicopter access). The BLM will consider the M&C area at the implementation plan level.</p> <p>Please also see response to comment 80-10 under Recreation.</p> |
| 34 - 35 | <p>4) No helicopter permits should be issued in new areas until such time as managers "have the ability, funding, and mechanism to collect adequate population demographic and habitat use data, to properly manage, mitigate, and monitor this activity." Id.</p> | <p>BLM bases permitting decisions on best available data. As is, current data is sufficient to determine if current and future helicopter permit requests should or should not be granted. BLM will incorporate all new applicable data, as it becomes available, in permit determinations. Also, permitted helicopter-supported skiing activities on BLM-managed lands are monitored. One facet of this monitoring is identification of critical Dall sheep and mountain goat habitat. Within these critical areas, helicopters are not permitted to land and are required to maintain horizontal and vertical distances from goats and sheep. BLM is currently analyzing 10 years of mountain goat data from the Haines Block area. This information will be used in the development of an implementation plan for the Haines area. Please also see response to comment 34-27 under DOI/BLM Compliance.</p> |
| 43 - 3 | <p>For this reason alone I would like to see heliskiing banned: there really isn't anywhere near Haines where the helicopters can take off and land without disrupting residents... except the airport, which the heliski companies are not interested in. If it in your power to help with this very serious problem, then I urge you to do so.</p> | <p>The BLM understands that Haines residents have several serious concerns about helicopter use in the Haines area. Please refer to comment 34-15 under Recreation regarding development of activity implementation plans for this area.</p> |

Recreation

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 62 - 4 | Currently Temsco has a number of landings, but there are none left for other operators. I think this management should change and allow for others to enter this business. | Please see response to comment 80-10 under Recreation. As implementation plans are developed, specific decisions regarding commercial recreation use limits (including helicopter access) would be established. BLM would work with all interested parties as these plans are developed. |
| 71 - 5 | Residents of Haines voted not to have summer helicopter use. If the BLM designated the land north of Glacier Bay National Park for inclusion in a ACEC/RNA it would help protect this area from summer heli-tourism expansion that some politicians seem so intent on granting against citizen desires. | Please see responses to comments 34-15 under Recreation and 34-27 under DOI/BLM Compliance. |
| 72 - 2 | Public lands should remain open to winter use by foot, skis, snowmachine. | BLM's goal is to maintain a diversity of recreation opportunities. The Proposed Action (D) for OHV travel management in all areas within this plan is "Limited." Additional or site specific Travel Management Planning will be addressed and implemented within implementation plans, such as ACEC or Special Recreation Management Plans. |
| 74 - 3 | The Goat Monitoring Area has been managed as such for several years. There is a considerable amount of commercial tour helicopter activity on the Skagway side of the area (summer glacier tours). No such activity has been permitted in the monitoring area. The Haines Borough has recently regulated the locations that commercial helicopter tour activity will be permitted in the borough, and has respected and incorporated the monitoring area. | Please see response to comments 34-15, 34-35, and 43-3 under Recreation. Also see response to comments 26-3 in Special Management Areas. |
| 76 - 2 | Rural folks here want no commercial recreational helicopter use in the Haines Borough -- on any land. Please limit or eliminated it on BLM land. For the goats and the rural residents. | Please see responses to comments 34-15 and 43-3 under Recreation. |

Recreation

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 80 - 9 | Heliskiing takes advantage of a time of year in which users and wildlife are not in the alpine glaciated environment that the SRMP represents. I believe that helicopter activities should be allowed to continue at current levels without the advancement of alternative D. I do believe that activities need to occur outside of current winter goat habitat and should end in late April. This insures that industry can utilize the full winter months and have a prosperous season. | The lands in the Haines Block containing Special Recreation Permits are being designated as a Special Recreation Management Area. The subsequent implementation plan for the area will address the affected resources, including mountain goats. |
| 80 - 10 | If Alternative D is preferred by the BLM, then objectives should be met to maintain helicopter access and use at current and past levels. | Thank you, comment acknowledged. The PRMP/FEIS lays the groundwork for determining what level of commercial recreation use might be appropriate. |
| 80 - 11 | I believe that the BLM needs to be aware that tours that originate in Skagway and land inside Haines Borough boundaries should be liable for taxation in the Haines borough. An example would be Temsco helicopters summer operations landing in the Chilkat and portions of the Ferebee Glacier. These landings should generate revenue for the Haines borough. | Data from the Special Recreation Permits, such as landings and visitor use levels, are available for public inspection. The Haines Borough may request this information annually for its taxation purposes. |
| 83 - 3 | I would caution however not to let heli ski operations run large volumes of people especially in summer. It is these large volume operations like in Juneau that really, I think, can have an impact at least on the noise quality of an area. | Please see responses to comments 34-15 and 43-3 under Recreation. |
| 85 - 8 | I find zero reference in the entire draft RMP/EIS to the provision of nonmotorized recreation; the final RMP/EIS needs to make a clear reference to the provision of balanced recreational management. | BLM's goal is to maintain a diversity of recreation opportunities. The preferred alternative sets the stage to proactively manage to maintain a range of recreation experiences, particularly on lands managed long-term by BLM. See response to comment 17-2 under Special Management Areas. |

Recreation

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 119 - 9 | There is significant need for a new and innovative supply of recreation opportunities and conservation system units to help meet the demands of the current and future population of Alaska and to strengthen the expanding tourism sector, which is critical to the state's economy. | Thank you, comment acknowledged. BLM considers applications for Special Recreation Permits on a case-by-case basis. BLM is also attempting to finalize land selection and transfers so that the public lands may be managed to meet public interests. |

End of section on Recreation

Renewable Energy

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 43 - 21 | Do please make sure that no power generation is allowed anywhere in the watershed; this would be most inappropriate as things now stand. | BLM shares your concern regarding potential impacts to fish and wildlife resources. Any proposed renewable energy development project would be developed in accord with the NEPA process. |
| 119 - 134 | While our organizations support utilizing renewable energy resources, we do not support the development of an energy resource that may cause damaging impacts to critical fish and wildlife resources. For example, wind resources may not be appropriate to develop in areas such as the Cold Bay BLM lands because of the presence of Steller's Eider. | Please see response to comment 43-21 under Renewable Energy. |
| 119 - 135 | <p>Wind Power</p> <p>Alaska has some of the best wind resources in the nation. A recent study commissioned by the State of Alaska¹⁷ concluded that about fifty villages have wind resources that could be successfully exploited. Below is a draft version of a high resolution map of the wind resources across Alaska. The final version will be available in February of 2006 on the Alaska Energy Authority (AEA) website. The AEA website has current detailed reports on the wind resource potential for villages across the state.</p> <p>Rural Alaska Energy Plan, prepared by MAFA in collaboration with Northern Economics, Inc., for the Alaska Energy Authority and the Alaska Industrial development and Export Authority, 2003.</p> <p>As is evident from the map, many of those villages are within the Ring of Fire planning area. Wind resource potential is characterized by the Department of Energy (DOE) National Renewable Energy Lab in seven wind classes. Any resource classified at 3 or above is considered to be developable, with a "Class 7" resource being the best. Alaska has a majority of the Class 7 wind resources in the United States. Most of these wind resources are located at or near the coasts, where most of Alaska's population also lives.</p> <p>The Aleutian Islands is the largest area of high wind power in the country. In the Beaufort Sea and Chukchi Seas coastal and offshore areas, wind power on the average is measured at Class 5. Most coastal areas of the Bering Sea have Class 5 or higher wind power. In the Yukon-Kuskokwim Delta, wind power of Class 5 extends inland up to 150 kilometers. The entire Alaska Peninsula, which is located within the Ring of Fire planning area, has wind power over Class 5, with most areas west of 162°W longitude having Class 7. Lower Cook Inlet also has high wind power potential, primarily in the area from Iliamna Lake to Kamishak Bay.</p> | BLM shares your concern regarding research and development of renewable energy resources. Text applicable to the Ring of Fire planning area has been added to Chapter 3. |

Renewable Energy

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 136 | <p>Geothermal</p> <p>Below is a map from the AEA website of the geothermal resources across the state. The dots illustrate geothermal "hot spots."</p> <p>Alaska has a high level of tectonic activity that guarantees major geothermal resources. There are over 140 hot springs and 40 active volcanoes in Alaska.¹⁸ Most of the volcanoes form the Alaska Peninsula and Aleutian Islands, which run from Southcentral Alaska for nearly 1500 miles southwest across the International Date Line. Several of these volcanoes are relatively close to Anchorage, across Cook Inlet. These areas are included in the Ring of Fire Planning Area.</p> <p>In 2003, the AEA, with the assistance of DOE and its contractors, completed an assessment of geothermal resources in Alaska. That assessment followed up on work performed in the 1980s. It identified two geothermal sites that have a high potential for development as energy sources. Those sites are on Akutan Island in the eastern Aleutian Archipelago, 766 miles southwest of Anchorage, and Mt. Makushin, near Dutch Harbor on Unalaska Island, about 35 miles from Akutan.</p> <p>Other sites with geothermal potential include Chena Manley, and Circle Hot Springs north and west of Fairbanks in Interior Alaska; Tenakee Hot Springs near Juneau, Mt. Edgecumbe Volcano and Goddard Hot Springs near Sitka, and Bell and Bailey Hot Springs near Ketchikan, all in Southeastern Alaska.¹⁹ Another site may exist near Mt. Sanford, in the Wrangell Mountains. There are also several hot springs on the Seward Peninsula between Nome and Kotzebue that are being studied for potential development, including Pilgrim Hot Springs. Additionally, Mt. Spurr has geothermal potential and is located close to the existing transmission lines that run from Beluga Power Plant into Anchorage.</p> | Please see response to comment 119-135 under Renewable Energy. |
| 119 - 137 | <p>Electricity</p> <p>Chena Hot Springs is planning its own 400 kW geothermal electric system. The \$1.7 million plant is expected to have a 30-year life. Six other resources in Alaska may produce electricity from naturally occurring hot water: Bell Hot Springs and Bailey Hot Springs (both near Ketchikan); Mt. Edgecumbe volcano (near Sitka); Akutan Island (in the eastern Aleutians); Mt. Makushin (near Dutch Harbor); and Mt. Spurr (near Anchorage). Several of these areas are within the Ring of Fire planning area.</p> | Please see response to comment 119-135 under Renewable Energy. |

Renewable Energy

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 119 - 138 | <p>Biomass</p> <p>Biomass is a renewable energy resource derived from the carbonaceous waste of various human and natural activities. While biomass typically is harvested from plant matter, in Alaska an important source of biomass fuel is fish oil. According to DOE, biomass has been the largest U.S. renewable energy source since 2000. Alaska has enormous untapped biomass potential. Three currently proposed or ongoing projects demonstrate the range of potential biomass material that can be made into useful fuel. They also show quite a geographic range. Those three projects are a gas collection and control system to capture methane at the Anchorage Municipal Landfill; a wood waste to ethanol plant in Ketchikan, which is in the Ring of Fire planning area; and a fish oil biodiesel project at a fish processing plant in Dutch Harbor, which is located near the Ring of Fire planning area.</p> | Please see response to comment 119-135 under Renewable Energy. |
| 119 - 139 | <p>Wood Waste to Ethanol</p> <p>Biomass provides the only renewable alternative for liquid transportation fuel, ethanol, which can be used either as an alternative fuel or as an octane-boosting, pollution-reducing additive to gasoline. The U.S. ethanol industry produced more than 2.81 billion gallons in 2003, up 32 percent from 2002's record annual production of 2.13 billion gallons.²⁰ Currently, 72 ethanol plants in nineteen states have the capacity to produce more than three billion gallons annually and an additional fifteen plants are under construction to add over 550 million gallons of capacity in 2004.²¹</p> <p>Advanced Bioethanol Technology allows fuel ethanol to be made from cellulose (plant fiber) biomass, such as agricultural forestry residues, industrial waste, material in municipal solid waste, trees, and grasses. This technology turns ordinary low-value plant materials such as corn stalks, sawdust, or waste paper into fuel ethanol.</p> <p>An innovative potential project is located within the Ring of Fire planning area. Nova Fuels Company announced in 2004 that it may build an ethanol plant in Ketchikan that will convert wood waste and garbage into about 15 million gallons of ethanol per year. The company may take over the Wards Cove site that Ketchikan Pulp Company formerly occupied. The plant, which would cost an estimated \$60 million, would employ between 35 and 50 people.²² The project could take garbage and wood waste from communities around the region.</p> | Please see response to comment 119-135 under Renewable Energy. |

Renewable Energy

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 140 | <p>Fish Oil and Biodiesel</p> <p>Biodiesel is an engine fuel manufactured from renewable sources, such as vegetable oils, recycled cooking greases or oils, or animal fats. In Alaska, perhaps the greatest potential source of bioenergy is the biodiesel produced by collecting fish oil at fish processing plants. Shore-based and floating groundfish processors produce approximately 8 million gallons per year of fish oil from as a byproduct of fish meal plants. Much of the oil is used in the process as boiler fuel for drying the fish meal or exported to Pacific Rim markets for livestock and aquaculture feed supplements and other uses. In 2001, with the assistance of AEA and the Alaska Science and Technology Foundation, processor UniSea Inc. conducted successful tests of raw fish oil/diesel blends in a 2.2 MW 2-cycle Fairbanks Morse engine generator. Since then, the company has expanded the operation and used over two million gallons of 50-50 raw fish oil-diesel blend for power production between July 2002 and June 2004. Locally produced fish oil biodiesel blend fuels have the potential to create a sustainable energy supply for use in remote regions of Alaska, yielding dramatic cost savings and reducing dependence on imported petroleum products. Easy-to-manufacture, cleaner-burning fish oil biodiesel blends could potentially replace millions of gallons of traditional diesel fuel now used in rural Alaska.</p> | Please see response to comment 119-135 under Renewable Energy. |
| 119 - 141 | <p>Harnessing Tidal and Wave Energy</p> <p>Alaska has one of the nation's top tidal energy resources and over half the nation's potential tidal wave energy. Much of this is located within the coastline of the Ring of Fire planning area. Alaska has twice as much coastline as the rest of the United States and tidal fluctuations that could some day be used to produce power. These fluctuations are present near Anchorage (Turnagain and Knik Arms), Prince William Sound, and Lower Cook Inlet near Homer.</p> <p>So far, only the tides near Cordova in Prince William Sound have been studied seriously for their tidal power potential. A study funded in part by AEA found that a six-megawatt tidal power facility near Cordova was technically feasible. However, during the study period, the City of Cordova elected to invest in a conventional hydro plant, thus eliminating the need for more power generation. The Cordova study also found that if the project did not have additional financing, i.e. a subsidy not uncommon to rural power projects, it would not provide a rate of return that would attract private investors. The company that was interested in developing the Cordova tidal plant, Tidal Electric Alaska, remains interested in other potential sites. This small-scale tidal technology may well prove achievable for smaller coastal communities if the right financing and/or incentives are present.</p> | Please see response to comment 119-135 under Renewable Energy. |

End of section on Renewable Energy

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 33 - 60 | <p>ROP Hazardous Materials and Waste Handling (page D-11, Haz 13).</p> <p>Please modify this stipulation to conclude with the words - "unless approved by AO". This would make it consistent with the stipulation above, and would be more consistent with how the state deals with temporary fuel storage facilities.</p> | <p>Agreed. Haz 13 on page D-11 will now read: Fuel storage will not occur closer than 100 feet from any river, lake, stream, or wetland unless approved by AO."</p> |
| 33 - 61 | <p>Standard Lease Terms, Section 7, Mining operations</p> <ul style="list-style-type: none"> To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations. <p>The above ROP appears to be an example of a previous ROP originally associated with oil and gas development. The State suggests that it is reasonable to assume that the impacts from a mining operation would be substantially different and greater than those associated with mineral exploration drilling. The impacts from a proposed mining operation should be evaluated and minimized through the Plan of Operations Approval process, but they will Likely be greater than those associated with the drilling of an exploration drill hole. It is not reasonable to expect mining companies to invest capital in mineral exploration if they cannot expect to develop the mineral resources. The State suggests that this section be deleted.</p> | <p>Agreed. BLM is presently working to develop a ROP for this Standard Lease Term that is more specific to mining operations.</p> |
| 34 - 31 | <p>We are concerned that the DEIS stipulation that helicopters maintain 1/2-mile horizontal and 1500-foot vertical distance from mountain goats does not sufficiently protect goats.</p> | <p>Based on monitoring information and identification of critical Dall sheep and mountain goat habitat (see response to 34-33 under ROPs and Stipulations), we believe that the horizontal and vertical distances described in FWH 16 are sufficient.</p> |
| 34 - 32 | <p>We are also concerned that the vague wording that heli-ski landings or skiing will not be permitted in critical ranges as identified by ADFG maps and refined by monitoring, does not adequately protect goats. See Appendix D at 5.</p> | <p>Please see response to comment 34-31 under ROPs and Stipulations.</p> |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 34 - 33 | <p>We instead request BLM adopt the Northern Wild Sheep and Goat Council's (NWSGC) recommendations in the Ring of Fire management area:</p> <p>1) Helicopter activity should avoid occupied or suspected nursery habitats and critical winter range by 1.5 km during critical periods (November 15 through April30th for winter habitat and May 1 through June 15 for nursery habitat).</p> <p>2) These restrictions would "require identification and mapping of mountain goat habitats and identifying exclusion zones ~ to the issuance of annual or multi-year helicopter recreation special use permits." See NWSGC recommendations, original emphasis.</p> | <p>Developing specific use limit windows for helicopter (or other commercial recreation activities) for a given area includes characterizing the area's user, knowing their tolerances for certain activities, and setting limits based on those tolerances; along with consideration of resource impacts, economic impacts, and safety concerns. To make those decisions at this level of planning would be arbitrary and capricious. Permitted helicopter supported skiing activities on BLM-managed lands are monitored. One facet of this monitoring is identification of critical Dall sheep and mountain goat habitat. Within these critical areas, helicopters are not permitted to land and are required to maintain horizontal and vertical distances from goats and sheep. Please also see response to comment 34-11 under DOI/BLM Compliance.</p> |

ROPs and Stipulations

| Comment # | Comment | Response |
|-----------|---|--|
| 42 - 16 | <p>EPA recommends the following improvements to the ROPs and lease stipulations in order to minimize adverse environmental impacts and provide more effective mitigation:</p> <p>Effectiveness of ROPs and stipulations. While many of the ROPs and stipulations included in the Ring of Fire Draft RMP/EIS should provide adequate environmental protections, there are others that may not be as timely or effective as expected due to vague wording, insufficient or ill-defined decision criteria and exception clauses. It is especially difficult to predict the effectiveness of mitigation measures that rely on decision criteria that include "whenever possible", "where possible", "minimize", and "if feasible" phrases. EPA is concerned that the use, monitoring, and enforcement of some of the ROPs and stipulations as they are currently written will not achieve the desired environmental outcomes or mitigation. EPA recommends the BLM clarify and improve language in the ROPs and stipulations (e.g., FWH I, FWH 14) by including measurable performance-based criteria.</p> <ul style="list-style-type: none"> · Agency Coordination and Consultation. The Final RMP/EIS should include specific details to describe how and when resource and regulatory agencies with resource management authorities would be consulted in a timely manner when the ROPs and stipulations are used in decisions that affect those resources. Consultation with potentially affected tribes should also be conducted and documented prior to future decisions that may impact their subsistence or cultural resources. · Basis for Numerical Requirements. EPA recommends that where specific numerical criteria are presented, such as set-back distances, buffer zone areas and aircraft altitudes, additional detail be provided to explain how those criteria were developed, in order to predict their effectiveness. Examples include FWH 6, FWH 16 and Water 1. · Monitoring and Enforcement. EPA recommends that a more detailed description of effective monitoring and enforcement of ROPs and lease stipulations be added to the Final RMP/EIS. It is important that monitoring be designed to ensure that information and data directly related to RMP objectives is gathered and reported in a systematic and predictable fashion. Details regarding the elements of monitoring activities, the frequency of monitoring, and mechanisms for modifying the RMP and/or permits, authorizations and leases when monitoring reveals that desired resource protections are not being achieved should be added to the Final RMP/EIS. | <p>ROPs and stipulations have been developed since the late 1990s through multiple BLM planning efforts, and were reviewed in this planning effort in consultation with the State of Alaska for their applicability to the Ring of Fire planning area. When a site-specific proposal is evaluated by BLM, BLM solicits comments from affected parties. Government-to-government coordination is part of this process. In addition, each proposal is subject to specific NEPA analysis, a portion of which is the development of appropriate mitigation measures. Monitoring and enforcement requirements are included in the implementation of the decision.</p> |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 81 | It also must discuss in detail how its Stipulations and ROPs would protect resource values, including subsistence, as well as its plans for enforcing them. | ROPs and stipulations are the minimum guidelines that will be used to ensure that resource impacts will be mitigated, on a site-specific basis, during the NEPA process associated with the Plan of Operations review and approval. Mineral activities will be required to follow BLM 3809 Regulations as well as federal and state laws and regulations. There is flexibility built into the ROPs so that site-specific analysis and subsequent remedial measures will provide mitigation for the particular proposed project. ROPs and stipulations are applicable to all of the authorizations within the Ring of Fire planning area. In addition, the proposals are subject to further NEPA consideration, within which subsistence would be analyzed. |
| 119 - 95 | BLM was over-reliant on ROPs — BLM stated that it will not impose conditions after the fact that interfere with a lessee's ability to obtain oil. See Draft RMP/EIS at D-1. Thus, BLM must impose fully protective measures as stipulations. Yet, BLM proposed only seven stipulations, which do not cover all the resources deserving of protection. These seven stipulations seek to protect swan nesting habitat, moose winter habitat, bald eagle nests, caribou calving areas, steep slopes, occupied structures and threatened and endangered species. Many resources such as water, vegetation, fish and other types of wildlife are not included. | BLM manages the lands and the resource values through the NEPA process, which considers the resource values and allows the development of site-specific mitigation and the assignment of ROPs and stipulations as appropriate for the project. |
| 119 - 96 | BLM should convert mitigation measures that seek to protect other resources to stipulations attached to any oil and gas and mineral leases to assure that they are enforceable, especially when they have the potential to impair the value of a lease. For instance, to protect water resources effectively it may be necessary to impose setbacks, such as those contained in ROP Water 1. A company interested in leasable minerals, however, could argue that these setbacks would make the lease less valuable and therefore should not be imposed. BLM must include this type of mitigation measure as a lease stipulation to assure that it can be imposed later. | ROPs and stipulations are the minimum guidelines that will be used so resource issues will be mitigated, on a site-specific basis, during the Plan of Operations review and approval. Mineral related activities are required to follow BLM 3809 Regulations as well as federal and state laws and regulations. There is flexibility built into the ROPs so that site-specific analysis and subsequent remedial measures will be adapted to the particular proposed project. |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 97 | BLM should include stipulations requiring that any oil and gas facilities be dismantled and removed upon completion of production and the land restored to its original condition. | Proper abandonment of Federal oil and gas leases is addressed in the Code of Federal Regulations and in BLM Onshore Oil and Gas Order No. 1. 43 CFR 3108.1 states that before a Federal oil and gas lease is relinquished the lessee is obligated to place all wells to be relinquished in condition for suspension or abandonment as BLM requires; and complete reclamation of the leased sites after stopping or abandoning oil and gas operations on the lease, under a plan approved by the appropriate surface management agency. Onshore Oil and Gas Order No. 1 (Approval of Operations on Onshore Federal and Indian Oil and Gas Leases) requires a drilling plan for each well drilled on a Federal lease. Each drilling plan contains a description of the drilling program and surface use program. The surface use program must include adequate measures for reclamation of disturbed lands no longer needed for either drilling or other subsequent operations. Infrastructure can be very expensive to develop. Upon completion of production, BLM will retain the option of keeping the infrastructure in the event it is needed for other activities. |
| 119 - 102 | ROP-F&W 1 (D-4): The requirement to "utilize existing roads and trails whenever possible" does not clarify what situation allows travel over pristine fish and wildlife habitat. This ROP should require a site-specific exception from the Authorizing Officer before allowing off-road or off-trail motorized vehicle travel. | Activities will be mitigated by the Plan of Operations and through the ROPs and stipulations and through the NEPA process, which allows site-specific analysis, identification of impacts, and the development of mitigation measures specific to those impacts. Future locatable mineral development activities will require a Plan of Operations that has to be approved by the AO and which will contain ROPs and stipulations. Mineral related activities will be required to follow BLM 3809 Regulations as well as federal and state laws and regulations. |
| 119 - 103 | ROP-F&W 6 (D-4): The setback requirement of 500 feet for roads, well pads, and other oil and gas facilities from fish-bearing waterbodies is insufficient. The setback should apply to all waterbodies, and should be from the "Riparian Reserve" area as defined by EPA for all BLM land. A "conservative riparian reserve width" for fish bearing streams is "the stream and the area on each side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of two site-potential trees, or 300 feet slope distance (600 feet total, including both sides of the stream channel), whichever is greatest." This definition leads to a minimum setback requirement of 800 feet from fish-bearing waterbodies, with the possibility that the setback would be greater depending on the characteristics of the waterbody. | Buffer distances are considered by resources specialists to be sufficient, when combined with other ROPs and stipulations to minimize impacts to riparian areas, water quality, and fish and wildlife. This determination was made based on knowledge of local soils and vegetation. |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 104 | ROP-F&W 12 (D-4): Other than illegal shooting and natural predation, the U.S. Fish and Wildlife Service lists collisions with powerlines as the major source of trumpeter swan fatalities. ⁶ As such, BLM should prohibit overhead powerline construction rather than allow it to merely avoid primary trumpeter swan breeding habitat. | Thank you, comment acknowledged. Additional restrictions and mitigation measures will be considered when evaluating individual projects, in consultation with appropriate parties. |
| 119 - 105 | ROP-F&W 13 (D-4): BLM should not permit recreational developments, permits, or leases on lakes or lakeshores with historically active trumpeter swan nest sites or staging areas unless the lessee or permittee can demonstrate on a site-specific basis that impacts will be minimal or if BLM can determine that there is no feasible or prudent alternative. "Swans will not nest on lakes intensively developed for recreation. For example, trumpeter swans have stopped nesting on Wembly Lake and Crystal Lake in the Grande Prairie area. Management | Thank you, comment acknowledged. FWH 13 on pg D-4 states that recreational developments, permits, or leases on lakes or lakeshores with historically active trumpeter swan nest sites will not be allowed. |
| 119 - 106 | ROP-F&W 15 (D-5): BLM failed to show that a quarter mile buffer around bald eagle nests will be sufficient to prevent disturbance. According to the Alaska Department of Fish and Game, "minimizing human disturbance near nest sites is necessary in order to protect Alaska's Bald Eagles from the potential harm caused by increasing human development." This ROP also provided for an "exemption" for mining operations but BLM failed to define that exemption. It also failed to include a ROP for other raptor nests, instead merely stating that "appropriate buffers around other raptor nests will be determined on site-specific analysis." BLM should increase the buffer in this ROP-F&W to at least a half-mile around all raptor nesting sites, with the possibility for site-specific increases depending on circumstances. | The 1/4-mile setback is a recommended setback, and can be adjusted as necessary. When an application comes in, BLM can adjust the setback depending on the site-specific situation. |
| 119 - 107 | ROP-F&W 16 (D-5): BLM's decision to limit helicopter landings for skiing but not for other activities is arbitrary. Similarly, allowing helicopters to get too close to sheep and goats that happen to be outside of their critical habitat will potentially disturb large numbers of animals. Helicopters should be required to maintain a minimum distance from Dall sheep and mountain goats regardless of what range they are in, and no heli-landings should be permitted in Dall sheep or mountain goat critical habitat regardless of what activity the helicopter is engaged in. | Helicopter activities that require a permit are subject to NEPA analysis. This includes site-specific analysis, identifying potential impacts, and developing appropriate mitigation measures. |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 108 | ROP-Water 1 (D-5): Please see the comments for ROP-F&W-a-6 as to why a 500-foot setback from fish-bearing waterbodies and a 100-foot setback for non-fish-bearing waterbodies would be insufficient. | Please see response to comment 119-103 under ROPs and Stipulations. |
| 119 - 109 | ROP-Water 3 (D-6): Diverting streams around mining operations will cause severe degradation to riparian areas. BLM should not allow mining activities in sensitive riparian wildlife and fish habitat. This includes riparian areas that are important to migratory birds, as well as the Mentasta and Alaska Peninsula caribou calving areas and critical salmon spawning habitat. | Please see responses to comments 119-95 and 119-96 under ROPs and Stipulations. |
| 119 - 110 | ROP-Water 6 (D-6): The requirement that all roads etc. will be sited in upland areas if possible needs to be clarified to address when a road may be sited outside of an upland area, e.g., in a riparian area. This ROP should require an exception from the Authorizing Officer before allowing a road, bunkhouse, office, equipment-storage or maintenance facility to be sited in a riparian area. | Please see response to comment 119-102 under ROPs and Stipulations. |
| 119 - 111 | ROP-Water 8 (D-6): BLM should require riparian vegetation to be re-established using native species, and the area should be managed for noxious weed infestations. | Veg2 on page D-8 states that vegetation treatments will be designed to prevent introduction of noxious weeds. Veg14 also on page D-8, states that in extreme cases where seeding or plugging may be necessary, use native vegetation and seeds. In addition a rehabilitation plan would be developed, working with the AFO biologists and botanists (Veg14). Soils 9 on page D-3 requires that disturbed areas be revegetated through seeding of native seed, and Soils10 directs that native species must be used; use of non-native vegetation must have specific approval from the AO. |
| 119 - 112 | ROP-Water 11 (D-6): Please see the comments for ROP-F&W 6 as to why a 500-foot setback from fish-bearing waterbodies and a 100-foot setback for non-fish-bearing waterbodies is insufficient. | Please see response to comment 119-103 under ROPs and Stipulations. |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 119 - 113 | ROP-Wetlands 2 (D-7): "Wetlands are considered valuable because they clean the water, recharge water supplies, reduce flood risks, and provide fish and wildlife habitat. In addition, wetlands provide recreational opportunities, aesthetic benefits, sites for research and education, and commercial fishery benefits." ¹⁰ According to a 2001 BLM report describing the status of lands in central Alaska, "[w]here [ATV] trails traverse permafrost and wetland terrain, glistening dark scars contrast starkly with the natural green and rust colors of the tundra. Trails crossing wetlands are often in excess of thirty feet wide. Heavy rutting is common." ¹¹ Thus, road or trail construction in wetlands should be prohibited, not merely avoided. | Please see response to 119-103 under ROPs and Stipulations. |
| 119 - 121 | BLM must include specific requirement in all mineral extraction leases and permits to ensure that each lessee and permittee prevents any damage to the environment or to public or private property. It also should include specific requirements designed to prevent hazards to public health and safety. | BLM considers the management strategies of neighboring land owners and, when determined appropriate, will incorporate those strategies into its management. |
| 119 - 122 | Stip-1: A quarter-mile buffer around trumpeter breeding areas is insufficient. Studies have shown that trumpeter swans are sensitive to human disturbances within ranges of up to one and a quarter miles. ¹² Additionally, BLM failed to specify a requirement as to what time period a nest must be abandoned before the Authorizing Officer (AO) may grant an exception based on non-occupancy of nests. BLM should allow no exceptions for oil and gas development within a mile and a quarter of trumpeter swan breeding areas. | The setback distance is a recommended setback, and can be adjusted as necessary. When an application comes in, BLM can adjust the setback and seasonal restrictions as necessary, depending on the site-specific situation. |
| 119 - 123 | Stip-2: BLM must clarify what constitutes "actual moose use of site-specific areas" and what type of "review and monitoring" of those areas is required before it will grant an exception. The AO should be required to perform systematic monitoring for a period of three years before granting an exception based on non-occupancy. | BLM manages the lands and the resource values through the NEPA process, which allows the development of site-specific mitigation and the assignment of ROPs and stipulations as appropriate for the project. Monitoring to determine the success of the mitigation measures, and the ROPs and stipulations is part of the overall process. |

ROPs and Stipulations

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 124 | Stip-3: BLM should prohibit any disturbances within a half mile of nests sites, particularly if there is a direct line of sight between the nest and the activity. BLM should not allow exceptions for nests that have been unoccupied for three consecutive years. "Bald Eagles frequently re-use nest structures . . . often for a period of many years." Similar stipulations should apply to swan nests. | Please see response to comment 199-122 under ROPs and Stipulations. |
| 119 - 125 | Stip-4: BLM should ensure caribou calving grounds receive year-round No Surface Occupancy stipulations, not merely seasonal limitations. | BLM manages the lands and the resource values through the NEPA process, which allows the development of site-specific mitigation and the assignment of ROPs and stipulations as appropriate for the project. The seasonal limitation is a recommended limitation, and can be adjusted as necessary. When an application comes in, BLM can adjust the restrictions as necessary, depending on the site-specific situation. |
| 119 - 126 | Stip-6: BLM's setback distances in this stipulation are patently inadequate. | Buffer distances are considered by resources specialists to be sufficient, when combined with other ROPs and stipulations to minimize impacts to the human environment. Also see response to comment 119-121 under ROPs and Stipulations. |

ROPs and Stipulations

| Comment # | Comment | Response |
|-----------|---|--|
| 119 - 129 | <p>In responding to BLM's Draft East Alaska RMP/EIS, EPA expressed specific concerns with the effectiveness of BLM's proposed ROPs and Stipulations for surface disturbing activities. EPA focused on BLM's future management of lands that it planned to open to mineral leasing and extraction and oil and gas exploration, development and production: "Many of the ROPs and stipulations included in the Draft EIS may not be as timely or effective as expected due to vague wording, insufficient or ill-defined decision criteria and exception clauses and stipulations,"</p> <p>EPA then made the following recommendations:</p> <ul style="list-style-type: none"> - Agency Coordination and Consultation. The Final EIS should describe how and when resource and regulatory agencies with resource management authorities would be consulted in a timely manner when the ROPs and stipulations are used in decisions that affect those resources. For example, consultation with U.S. Fish and Wildlife Service should occur prior to determining bald eagle nest buffers as described in ROP-F&W-b-4 and that requirement should be included in the ROP. Consultation with potentially affected tribes should also be conducted prior to future decisions that may impact their subsistence or cultural resources. If this consultation was designed as part of the Memoranda of Understanding (MOUs) that were described in Chapter V of the Draft EIS, additional detail to explain that process would be helpful. - Basis for Numerical Requirements. EPA recommended that where specific numerical criteria were presented, such as set-back distances, buffer zone areas and aircraft altitudes, additional detail should be provided to explain how those criteria were developed in order to predict their effectiveness. For example, justification for choosing the 500-foot buffer distance for fish-bearing rivers and lakes in ROP-F&W-a-6, ROP-Water-a-1 and other ROPs should be included. - Monitoring and Enforcement. EPA recommended that a description of effective monitoring and enforcement of ROPs and lease stipulations be added to Appendix III in the Final EIS, or appropriate references to monitoring and enforcement details that were contained in the main text of the EIS should be inserted. <p>EPA also questioned the effectiveness of BLM's ROPs in sensitive habitat in Alaska considering their unproven track record: The rationale in the Final EIS does not support the choice of the new proposed Preferred Alternative, which relies upon experimental and unproven stipulations and ROPs as performance-based mitigation measures. Mitigation measures and management techniques should have a proven track record before we rely on them to protect the environmentally sensitive areas. The potential for impacts could be significantly reduced by gradually phasing in the leases in environmentally sensitive areas after the effectiveness of stipulations and ROPs have been demonstrated in less sensitive areas.</p> <p>(Source: March 3, 2005, letter from Michelle Pirzadeh, EPA Region 10 Director of Office of Ecosystems, Tribal and Public Affairs, to Henri Bisson, BLM Alaska State Director, on the</p> | <p>BLM agrees with the suggestion to consult with tribes on actions that may impact subsistence or cultural resources. Section 810 of ANILCA requires that BLM review all land use decisions to determine if they "may significantly restrict" subsistence uses. If so, then public notice, a hearing and additional administrative determinations to minimize impacts are required. The BLM will continue to comply with the requirements of Section 810 of ANILCA.</p> <p>Consultation with USFWS is required under Section 7 of the Endangered Species Act prior to initiation of any project by the BLM that may affect Federally listed or endangered species or its habitat. The bald eagle is not listed as threatened or endangered in Alaska. BLM utilized information from USFWS to determine bald eagle nest buffer distances. A 500 foot buffer from fish-bearing streams, rivers or lakes was considered by resource specialists to be sufficient, when combined with other ROPs and stipulations, to minimize impacts to riparian areas, water quality, and fish and wildlife. This determination was made based on knowledge of local soils and vegetation.</p> |

Final Amended Integrated Activity Plan/Environmental Impact Statement (Final EIS) for the Northeast National Petroleum Reserve-Alaska (NE NPR-A).)

We were surprised to find that the ROPs and stipulations in Appendix D of the Draft Ring of Fire RMP/EIS were nearly identical to the Draft East Alaska RMP/EIS and that BLM ignored EPA's criticisms. BLM must consider the EPA's suggestions in this Draft RMP/EIS, and in each forthcoming draft RMP/EIS, including the Bay RMP, Kobuk Seward RMP, and South NPR-A Integrated Activity Plan (IAP).

End of section on ROPs and Stipulations

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 7 - 3 | The first thing I would like to comment on is the proposed Knik Special Recreation Management Area, in Alternative C and D. I fully -- Alaska Coalition fully supports a designation of the Knik River as a Special Designation Management Area. | Thank you, comment acknowledged. |
| 7 - 9 | The third comment I want to make is on the Neacola proposed ACEC. I've done personal mountaineering trips and guided mountaineering in the Alaska Range before, and I think that the Neacolas could offer some great guiding opportunities; however, I think ACEC is an appropriate designation that could work with potential guides and operators. | Thank you, comment acknowledged. The Proposed Action would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC. |
| 8 - 3 | I think the one thing that hasn't been mentioned, as I look at the list of things of the SRMA, and I noticed that it was considered on one of the other areas as sort of an item of -- sort of the quality-of-life impacts. | BLM intends to further define the management of the units through development of implementation plans which incorporate the goals stated in Appendix F. |
| 8 - 5 | There are some high-use areas that also are very residential areas, and that's an important consideration. | BLM intends to further define the management of the units through development of implementation plans thath incorporate the goals stated in Appendix F in the Proposed RMP/Final EIS. |
| 12 - 3 | We are happy to see that the BLM's preferred alternative supports a proposed Knik River special recreation management area. The BLM -- the BLM lands at the headwaters of the Knik River watershed could and should be a world-class recreational destination, but it is important that these lands are properly managed and that OHV use is contained to appropriate areas. We agree with the preferred alternative and the BLM that the BLM should closely manage OHV activities in the proposed Knik River SRMA. This area is currently under heavy pressure from unregulated OHV use, and any management and any planning would be very welcome. We would also look forward to being part of this planning process for the Knik River area. | Please see response to comment 11-4 under Off-Highway Vehicles. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 12 - 7 | My final point is I'd like to support the Neacola Mountains ACEC. ACE supports this designation for the protection of these scenic Neacola Mountains and I hope to this summer have on-the-ground knowledge of this scenic area. | Please see response to comment 7- 9 under Special Management Areas. |
| 13 - 2 | The ACEC that's proposed for this area is fantastic, and we definitely strongly support that management designation. We hope that it will be managed in accordance with the adjacent National Park Service land and the guidelines that they have set forth for their areas. Hopefully, that can be cooperatively managed. | Thank you, comment acknowledged. The Proposed Action would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC. In the implementation plan that will be used to develop specific management measures for the ACEC, BLM will coordinate closely with the neighboring NPS land managers and attempt to be as consistent in our management as allowed by our policies. |
| 13 - 3 | And I was also looking at -- I know there has been a little bit of concern about whether ACEC is an appropriate designation for this area. So I did a little searching around and found that there is a national scenic area, which is a non-NLCS site, and I believe it's in Oregon. And I want to recommend that that sort of designation could also be considered for the Neacola Mountains since the primary goal within that area is to protect the scenic values and to enhance them, keep them as they are for the future. | The Columbia River Gorge National Scenic Area was created by a special act of Congress (P.L. 99-663 November 17, 1986 100 Stat.42 76). BLM examined the available designations and determined that the assignment of an ACEC designation was most appropriate for the Neacola Mountains. |
| 14 - 6 | And just my final comment is on the Knik River area. The purpose of the State's actions there is to actually set up a management process, and the motorized users have been quite instrumental in that in getting that process moving forward in a way that they are comfortable that they won't throw out the baby with the bath water. But it is very much -- the idea there is to get rid of the riffraff, to be able to have an enforcement mechanism, to educate users, and we see that very compatible with the special management area that you have designated in that location. | We intend to further define the management of the Knik River SRMA through the development of an implementation plan, which will incorporate the goals (stated in Appendix F) for the Knik River SRMA. |
| 16 - 2 | Monitoring in this area should be expanded to focus on helicopter impacts to other species known to be sensitive to such intrusions, such as wolverine, brown bear. | Any changes to the monitoring focus will be determined during the implementation-level planning process for the Haines Block SRMA, which will occur only after completion of the Proposed RMP/Final EIS. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 17 - 2 | However, we find no reference to providing opportunities for non-motorized activity in the entire Plan. (In fact, we found only one mention of the term, on page 4-112.) In particular, we are very disappointed that the Knik River SRMA contains no reference to, or plans for, non-motorized recreation despite the fact that the area is currently used by both motorized and non-motorized recreationists. We are certain that BLM is aware that people who have historically used this area for non-motorized recreation now feel pushed out by the unregulated motorized activity, vandalism, shooting, etc. AQRC believes BLM has the responsibility to provide recreational opportunities for all users of its lands. | Please refer to Appendix F where the Knik River SRMA goals are outlined, including "maintaining existing recreation opportunities." The implementation-level plan for the SRMA will conform to the goals and objectives outlined in the PRMP/FEIS, including maintaining opportunities for non-motorized use. |
| 17 - 4 | We request, therefore, that the Preferred Alternative in the Final Plan affirmatively state that one goal of the Knik River SRMA is to provide opportunities for non-motorized users. It well may be that a corridor along the river could be created and designated open to all type of motorized activity without harming the resource, but we would expect many of the upland areas would be damaged by such activity and should be managed for non-motorized activity. | Please see response to comment 17-2 under Special Management Areas. |
| 17 - 7 | But if, in fact, BLM intends to create, and manage, the Knik River SRMA strictly for motorized activity, AQRC objects, strongly, to both Alternatives C and D. | Please see response to comment 11- 4 under Off-Highway Vehicles. |
| 18 - 2 | Please approve the Area of Critical Environmental Concern (ACEC) for 229,000 acres in the Neacola Mountains -Blockade Glacier area. This is badly needed to protect wild lands and the recreational values that depend on them. Wildlife habitat is important here, and this area is part of the western panorama seen from Anchorage. Nothing should be allowed to impair its natural character. | Please see response to comment 7-9 under Special Management Areas. |
| 18 - 3 | We favor the Knik River Special Recreation Management Area that BLM has proposed. My brother saw this area while he was working in Anchorage. BLM should regulate this area to make sure off-road vehicles (ORV) will not damage the fish and wildlife habitat there. | Please see responses to comments 4-2 and 11-4 under Off-Highway Vehicles. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 18 - 5 | The Haines-Skagway Backcountry should be protected in an SRMA of 113,000 acres to protect the natural landscape and wildlife. Commercial tours arriving by helicopter and light airplanes are becoming a problem in this area and could damage wildlife habitat, potentially leading to disappearance of the mountain goats that people now enjoy seeing there. | The lands in the Haines Block containing Special Recreation Permits are being designated as a Special Recreation Management Area. The subsequent implementation plan for the area will address the effected resources, including mountain goats. Large portions of the lands surrounding Haines have been selected by the State of Alaska and appear on their priority list for 2006. Title to these lands will be transferred by BLM. The mountain goat inventory data is being analyzed along with other available information, and will be utilized in the preparation of the Haines Block SRMA implementation plan. When compiled and analyzed, the assessment will be made available as a published report. |
| 19 - 2 | Specifically we urge: Knik River Special Recreation Management Area should be approved. | Thank you, comment acknowledged. |
| 19 - 6 | Haines-Skagway Back country SRMA should be adopted for this 113,000-acre area to provide management that will prevent excessive impacts from commercial tours using helicopters and fixed-wing aircraft. Wildlife values, including mountain goats, should be given secure protection by management prescriptions in this SRMA. | Please see response to comment 18-5 under Special Management Areas. |
| 19 - 7 | Neacola Mountains -Blockade Glacier ACEC of 229,000 acres should be adopted to protect the extraordinary natural landscapes found there and the wildlife habitat (especially for bear) and recreational values such as skiing and ice climbing. This is of special value to Anchorage residents because it includes the city's western view panorama. Management prescriptions should give secure protection to this area against all forms of development. | Please see response to comment 7-9 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 26 - 1 | <p>I am writing to comment on the proposed management of the "Goat Monitoring and Control Area" in the Haines vicinity. I am pleased to see that the BLM has continued to designate the area as a monitoring area. However, I am concerned to note that the overall management designation for the surrounding area is that of a Special Resource Management Area (SRMA).</p> <p>The Goat Monitoring Area has been managed as such for several years. There is a considerable amount of commercial tour helicopter activity on the Skagway side of the area (summer glacier tours). No such activity has been permitted in the monitoring area. The Haines Borough has recently regulated the locations that commercial helicopter tour activity will be permitted in the borough, and has respected and incorporated the monitoring area.</p> | BLM will consider the Mountain Goat Monitoring and Control Area when we develop the implementation plan for the Haines Block SRMA. |
| 26 - 3 | <p>The SRMA designation for the area seems inappropriate. A SRMA is managed "to meet the strategically-targeted primary recreation market demand." (DEIS at 3-174) A more appropriate designation would appear to be that of a Resource Natural Area (RNA), as part of an Area of Critical Environmental Concern (ACEC). An RNA is a particular ACEC that provides for biological diversity and opportunities for research and education. (DEIS at 3-173).</p> | BLM did consider and evaluate this nomination as an ACEC as required by NEPA (40 CFR 1503.1) but did not assign this designation in the Draft RMP/EIS. The PRMP/FEIS elaborates on this consideration in Section 2.2. |
| 27 - 4 | <p>Specifically, we request that BLM adopt the proposed special recreation management designation for the Knik River to allow for community-based planning efforts, involving all multiple user groups, to determine the best balance for managing access issues, protecting critical fish and game habitats, and resolving user conflicts.</p> | Please see response to comment 11-4 under Off-Highway Vehicles. |
| 27 - 6 | <p>Impacts to salmon spawning streams, trail damage, safety concerns, and illegal dumping are management issues that must be addressed by the Knik River Special Recreation Management Area.</p> | See response to comment 12-4 in Off-Highway Vehicles. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 27 - 9 | Game species, such as caribou, moose, bear, salmon, and dolly varden, are known to inhabit or migrate through the upper Chilligan block, and we support protective measures, such as the ACEC designation, which will help ensure sustainable future management of these populations. | The Chilligan Block was considered but not included in the proposed ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. |
| 28 - 1 | Enclosed please find our reasons and recommendations for designating those BLM lands included in the RMP/EIS which lie within the boundary of Palmer Hay Flats State Game Refuge as Alternative C, with additional provision for withdrawal of these lands as an Area of Critical Environmental Concern (ACEC) designation. | BLM considered the nomination of the Palmer Hay Flats State Game Refuge as an ACEC but determined that it would not be an appropriate designation. For further discussion of this issue, please see Section 2.2. |
| 28 - 5 | Elsewhere under "General information on land status and management", the RMP/EIS even acknowledges the "outstanding habitat that supports huge flocks of migrating waterfowl, shorebirds, and sandhill cranes, as well as salmon and moose. The Cook Inlet population of beluga whales is also known to use the estuaries adjacent to this area. Because of its proximity to major population centers, this area receives a great deal of recreational use." These statements alone, should Qualify the Palmer Hay Flats State Game Refuge for ACEC designation. | Please see response to comment 28-1 under Special Management Areas. |
| 28 - 10 | A RESOLUTION RECOMMENDING THE DESIGNATION OF ALTERNATIVE C OF THE BUREAU OF LAND MANAGEMENT (BLM) RING OF FIRE RESOURCE MANAGEMENT PLAN (RMP) AND THE ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR LANDS WITHIN AND ADJACENT TO THE BOUNDARIES OF PALMER HAY FLATS STATE GAME REFUGE AND THE DESIGNATION OF SUCH LANDS AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). | Please see response to comment 28-1 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 28 - 18 | <p>WHEREAS, Alternative C emphasizes protection and enhancement of resource values, with more constrained oil and gas leasing and mineral exploration and development;</p> <p>WHEREAS, Alternative C has identified one Area of Critical Environmental Concern (ACEC), to be withdrawn from consideration for oil and gas leasing and development and mineral location;</p> <p>WHEREAS, the ecological integrity and biological health of lands adjacent to Palmer Hay Flats State Game Refuge affect the integrity and health of the Refuge's wildlife habitat;</p> <p>NOW, THEREFORE, BE IT RESOLVED, that Alaskans for Palmer Hay Flats recommend lands within and adjacent to Palmer Hay Flats State Game Refuge be given Alternative C designation in the BLM Ring of Fire RMP/EIS;</p> <p>BE IT FURTHER RESOLVED, that lands within and adjacent to Palmer Hay Flats State Game Refuge be designated an Area of Critical Environmental Concern (ACEC), closed to any future oil and gas leasing, development and mineral location.</p> | Please see response to comment 28-1 under Special Management Areas. |
| 29 - 4 | We support the Knik River SRMA concept as long as its purpose is to manage these lands in the spirit of the pending State Knik River Public Use area legislation. | Thank you, comment acknowledged. As an implementation plan is developed for the Knik River SRMA, seasonal closures, trail designations, or other management techniques could be considered to assist BLM to meet management objectives. BLM is committed to working with all interested parties in developing the implementation plan for this area. BLM will consider the management of the adjoining lands, and attempt to be as consistent in our management as allowed by our policies. |
| 29 - 5 | The AOAA believes that SouthCentral Alaska needs a place designated for motorized recreation. The proposed Knik River Public Use Area maintains the Knik River as a suitable destination for motorized recreation. We would like the draft RMP regarding the Knik River SRMA to reflect that purpose as well. | The purpose of the Knik River SMRA would be to maintain a diversity of uses while protecting the area's resources. See response to comment 25-3 under Coordination and Compatibility regarding implementation planning and possible management measures. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 33 - 11 | BLM has identified three large tracts of land that, should these lands remain in long term BLM ownership, will benefit from a more focused management approach provided by the designation of Special Management Areas. The proposals will not encumber any state or native selected lands but will provide BLM with the necessary tools to devote additional resources to management through more site specific planning for these areas should they remain in long term BLM ownership. | Thank you, comment acknowledged. |
| 34 - 3 | The articulated planning process was not followed for the Haines Block. Due to a multitude of Haines Block deficiencies, it is likely there are similar planning process deficiencies for other geographical areas. We recommend BLM do a Supplemental DEIS (SDEIS) to correct factual errors, supply missing information, explore reasonable alternatives not considered in the DEIS, modify existing alternatives, and supplement and improve the analysis. A SDEIS will give an interested public the opportunity to comment on new information, new alternatives, and new analysis before BLM decides on a final plan. | <p>The Draft RMP/EIS was prepared in accordance with applicable law. We took a hard look at the direct, indirect and cumulative impacts of the decisions that were made. Our actions were in accordance with NEPA, the regulations issued by the Council on Environmental Quality, as well as the Department and our NEPA Handbook, H-1790-1 and other applicable environmental laws.</p> <p>BLM manages lands and resource values through the NEPA process. ROPs and stipulations have been developed, which considers resource values and allows the development of site-specific mitigation as appropriate.</p> <p>The articulated planning process (Chapter 1) will be followed specifically for the Haines Block SRMA during the implementation level planning phase, and the public will have another opportunity to comment.</p> |
| 34 - 5 | 2) Planning Process Deficiencies BLM failed to carry out the Planning Process (as articulated in the DEIS at 1-10) for the Haines Block. | Please see response to comment 34-3 under Special Management Areas. |
| 34 - 14 | We also request that this information form the basis for a range of alternatives to address Haines Block planning issues, as required. See Handbook at 20. | Please see response to comment 34-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 34 - 16 | <p>That said, LCC proposed a different management strategy during the 2004 scoping process that satisfies the rigors of the planning process by creating an opportunity to manage BLM lands differently, as intended. That is, we proposed that the current M&C Area and BLM lands north of and adjacent to Glacier Bay, be designated as an ACEC/RNA. This idea was supported by ADFG: "We support the general concept of naming BLM lands in the Haines and Skagway area as a Research Natural Area (RNA)." See June 16, 2004 letter from Polly Hessing to Robert Lloyd. LCC's nomination was also supported by the Alaska Center for the Environment, Alaska Coalition, Alaska Wildlife Alliance, Defenders of Wildlife, Sierra Club Alaska Chapter, Southeast Alaska Conservation Council, and the Wilderness Society. See 2004 ACEC/RNA support letter. Our ACEC/RNA nomination allowed for lands north of the M&C Area to be managed for recreation.</p> | <p>BLM considered an ACEC designation for this area, but determined that it would not be appropriate. For further discussion of this matter, see Section 2.2.</p> |
| 34 - 18 | <p>In terms of resolving the major Haines Block planning issue of conflicts between increasing helicopter use and protecting goats and other wildlife, all alternatives in the DEIS are essentially the same, and all resolve the conflict in the same way. That is, BLM currently has a M&C Area, and all other Haines Block land has been open to increasing levels of helicopter recreation. Whether it's designated as a SRMA or not, BLM has managed Haines Block lands as a SRMA by prioritizing increasing levels of helicopter recreation. Alternatives A, B, C, and D in the DEIS would continue that management strategy and provide no variation in levels of resource production or protection.</p> | <p>Please see response to comment 26-1 under Special Management Areas.</p> |
| 34 - 20 | <p>3) Modified Alternatives C and D</p> <p>LCC agrees with the DEIS assessment that there is a need for special management in the Haines Block. See DEIS at 4-177. While a SRMA is the appropriate special management tool for recreation, it is an inappropriate and inadequate special management tool for conserving and protecting the special Haines Block wildlife values identified in the DEIS.</p> | <p>BLM considered the nomination of the Haines Block as an ACEC and the remaining lands as an RNA but did not assign those designations in the PRMP/FEIS. The lands in the Haines Block containing Special Recreation Permits are being designated as a Special Recreation management Area. The subsequent implementation plan for the area will address the effected resources, including mountain goats.</p> |

Special Management Areas

| Comment # | Comment | Response |
|-----------|---|--|
| 34 - 22 | With this mandate to meet demand and the noted anticipated increase in demand for helicopter-supported recreation, BLM would be hard pressed to manage the SRMA for anything but helicopter-supported recreation. That is, there is an inherent conflict between the demand for new helicopter landing areas and protecting an area from the mandated activity. The appropriate special management designation for managing and protecting wildlife is an ACEC. | Please see response to comment 34-20 under Special Management Areas. |
| 34 - 23 | A RNA is the appropriate special management designation for managing and protecting an area with "a particularly diverse and unique set of flora and fauna", and especially when research is needed to understand the long term impacts of helicopter activity on goats: "Research to date has not clearly identified thresholds of disturbance that trigger unacceptable responses." See NWSGC Position Statement. The lack of information on goats was recently corroborated by ADFG biologists in Juneau: "When state biologists started wondering whether planned development east of Lynn Canal would effect mountain goat populations, they realized they didn't know much about the animals, period." See November 6, 2005, Juneau Empire, Getting their goat: State biologists to study effects of gold mine, proposed road on mountain goats. | Designation as a SRMA will provide necessary management, and is proposed in the Proposed RMP/Final EIS. Developing use limits for heli-skiing (or other commercial recreation activities) for a given area includes characterizing the area's user, knowing their tolerances for certain activities, and setting limits based on those tolerances; along with consideration of resource impacts, economic impacts, and safety concerns. To make definitive and long-term mountain goat management decisions at this level of data gathering and analysis would be arbitrary and capricious and is what BLM is trying to avoid. |
| 34 - 24 | FLPMA requires BLM "give priority to the designation and protection of areas of critical environmental concern." See 43 U.S.C. 1712. Even though BLM is also required to inventory all resources and values, including recreation, recreation does not rise to the level of being prioritized, as do areas of critical environmental concern. Id. at 1711. Since the "best available knowledge" indicates there is strong scientific evidence that goats are subject to disturbance from helicopter activity that might endanger herd viability (see NWSGC Position Statement), BLM cannot legitimately put the existing M&C Area into a SRMA. The NWSGC states "the sensitivity of mountain goats and their habitats call for a conservative approach until we have more comprehensive, science-based recommendations and mitigation measures identified." Id. It is clear that until more research occurs, it is absolutely essential to maintain a viable baseline or reference area protected by an ACEC/RNA designation. A SRMA only guarantees that demand for helicopter recreation will be met. | BLM disagrees. Designation as a SRMA will also provide protection. See response to comment 34-11 under DOI/BLM Compliance. |

Special Management Areas

| Comment # | Comment | Response |
|-----------|--|---|
| 34 - 25 | <p>Therefore, the Haines Block should include two SMA's. In the conservation alternative (C), all Haines Block lands would be designated an ACEC, with the M&C Area and lands adjacent to Glacier Bay designated a RNA. The balanced alternative (D) would include a SRMA to protect existing recreational uses in the northern half of the currently designated SRMA, and an ACEC/RNA for the M&C Area and remaining Haines Block lands.</p> <p>These suggested modifications better meet the planning criteria. That is, both the original and modified Alternatives C and D meet criteria #2,7,8,9, and 14. But only modified Alternatives C and D also meet criteria #5 (consistent management with Glacier Bay National Park where helicopter landings are not allowed), #6 (consistent with suggestions made by ADFG, Chilkat Indian Village, and other interested parties), #12 (RNA provides the opportunity and mandate for needed research), and #15 (management to protect the unique flora and fauna as identified in the DEIS for the Haines Block). Modified Alternative D also meets criteria #11 (focus on the relative values of the resources – that is, there is a value for helicopter-based recreation that's recognized in a SRMA and a differing value for wildlife habitat protection that's recognized in an ACEC/RNA). See DEIS Appendix B at 27 and 28.</p> | <p>BLM considered the nomination of the Haines Block as an ACEC and the remaining lands as an RNA but did not assign those designations in the Proposed RMP/Final EIS (see Section 2.2). The lands in the Haines Block containing Special Recreation Permits are being designated as a Special Recreation Management Area. The subsequent implementation plan for the area will address the effected resources, including mountain goats. Large portions of the lands surrounding Haines have been selected by the State of Alaska and appear on their priority list for 2006. Title to these lands will be transferred by BLM. Although BLM has gathered data over an 11-year period, there are no proposals to study the resources by anyone outside the BLM.</p> |
| 34 - 26 | <p>4)ACEC/RNA designations are supported by FLPMA and BLM Handbook</p> <p>“Give priority to designating and protecting areas of critical environmental concern.” See Handbook at 11 and 43 U.S.C. 1712. That is, if BLM takes the NEPA required “hard look” and seriously considers concerns expressed by ADFG, NWSGC, and wildlife conservation advocates, they will prioritize the requested ACEC designation as mandated.</p> | <p>BLM disagrees that the Haines Block is an “an area of critical environmental concern.” BLM believes an SRMA designation and the subsequent implementation plan for the area will address affected resources, including mountain goats, adequately while also providing recreation opportunities.</p> |

Special Management Areas

| Comment # | Comment | Response |
|-----------|---|---|
| 34 - 28 | <p>· "In developing alternatives, the BLM must consider the relative scarcity of the values involved and the availability of alternative means and sites for realizing those values (43 U.S.C. 1712(c)(6))." See Handbook at 22. In our 2004 nomination we made the case that naturally occurring mountain goat populations are a scarce BLM resource outside of the Haines Block. See LCC's 2004 nomination letter. On the other hand, BLM and US Forest Service offer thousands of helicopter landing opportunities for recreational uses along the entire east side of Lynn Canal from Juneau to Skagway. See USDA Helicopter Landing Tours on the Juneau Icefield 2003 – 2007 EIS, and the May, 1995 USDA and BLM Environmental Assessment for Helicopter landing Tours in the Skagway and Haines Area. In addition, BLM offers landing sites from the west side of Skagway to the Canadian border. Id. A BLM SMA to protect wildlife from helicopter-supported recreation is to date non-existent. It doesn't get any scarcer than that.</p> | <p>BLM has considered mountain goat populations and available recreational opportunities in the development of the Draft RMP/EIS and the Proposed RMP/Final EIS, as well as BLM management objectives. BLM will continue to consider the relative abundance/scarcity of these resources and the agency's management objectives when developing more specific management plans for the area in question.</p> |
| 34 - 29 | <p>"Designate research natural areas and outstanding natural areas as types of ACECs using the ACEC designation process." See, Handbook Appendix C at 28. As stated previously, the Haines Block is noted for its goat habitat and diverse and unique flora and fauna and is perfectly suited for a RNA. See DEIS at 3-56.</p> | <p>BLM, under Alternatives C and D, proposes a Haines Block SRMA, and believes a SRMA designation, rather than an ACEC designation, would provide the most appropriate management strategy for these lands. See response to comment 26-3 under Special Management Areas.</p> |
| 35 - 2 | <p>More specifically, we support:</p> <ul style="list-style-type: none"> ·Neacola Mountains designation as an Area of Critical Environmental Concern ·Knik River designation as a Special Recreation Management Area ·Haines/Skogway Special Recreation Management Area ·Management of motorized use region wide to protect wildlife resources and scenic values. | <p>Thank you, comment acknowledged. The Proposed Action would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, designate BLM-managed lands in the Knik River and Haines Block areas as Special Recreation Management Areas, and would delineate travel management for off-highway vehicle use as "Limited".</p> <p>The PRMP/FEIS recognizes the impacts to natural resources from unregulated OHV use (Chapter 4). Such documented resource impacts, combined with the need to continue to provide for a diversity of recreational experiences, drive the OHV proposals described in the Proposed Action (D) and Alternative C. These proposals include designating BLM-managed lands as limited to OHVs, with site-specific limitations to be determined in implementation level planning.</p> |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 36 - 3 | Four of the BLM parcels listed in the nomination fall within the portfolios that we have identified for the Alaska Peninsula and Cook Inlet Basin ecoregions. We encourage BLM to review these parcels and designate them as Areas of Critical Environmental Concern (ACEC), Research Natural Areas (RNA), Outstanding Natural Areas (ONA), or Wild and Scenic Rivers (WSR) as appropriate. Table 1 outlines the key ecological values of each portfolio area and the recommended protection for the parcel within it. | BLM does not think it is appropriate to designate these parcels as an ACEC, RNA, ONA, or WSR. These parcels do not meet the relevance and importance criteria set forth in 43 CFR 1610.7(a) for designation as an ACEC, nor do they meet the criteria for designation as an RNA (see Section 2.2 for further explanation). The parcels do not possess unique scenic, scientific, educational, or recreational values, and they do not meet the criteria for WSR designation. |
| 40 - 1 | Regarding your RMP: Create an ACEC/RNA to protect goats. | Please see response to comment 26-3 under Special Management Areas. |
| 40 - 3 | 1) Diverse and unique resources such as this need protection from increasing heli-recreation, and ACEC/RNA designation will provide this protection. | Please see response to comment 34-27 under DOI/BLM Compliance. |
| 40 - 4 | 2) The RMP puts existing Goat Monitoring and Control Area into an SRMA with a mandate to meet public demand for heli-recreation. This conflicts with a control area intended to protect goats. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 41 - 4 | The Alaska Miners Association supports Alternative B. We recognize that the preferred alternative (Alternative D) would allow for increased access to lands for mineral exploration and development when compared to the status quo, however, we oppose the proposed designation of an Area of Critical Environmental Concern (ACEC) in the Neocola Mountains. We see no justification for such a restricted area. Most of the federal land in Alaska is already off limits to nearly all development, especially closed to mining. To add any restrictions to the land that remains is not appropriate. | BLM believes the ACEC designation is appropriate. As reported in Table 2.6-1 of the Proposed RMP/Final EIS, mineral development potential in the area is low. The area, however, provides numerous and diverse recreation opportunities and has other recognized values. BLM believes the ACEC is the most appropriate designation to ensure preservation of identified values, outstanding natural scenery, visual resources, scenic values, and existing recreation opportunities of the area. An ACEC designation does not close the area to mineral entry or development. They offer an additional layer of protection to the critical resource that the ACEC was created for. Additional ROPs or Stipulations may be included as part of the NEPA analysis or the Plan of Operations. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 42 - 9 | We support the BLM's proposal to designate the Neacola Mountains ACEC, the Knik River Special Recreation Management Area SRMA and the Haines Block SRMA. On the basis of information presented in the Draft RMP/EIS, we recommend that these designations be carried through for the Final RMP/EIS and Record of Decision (ROD). | Please see response to comment 35-2 under Special Management Areas. |
| 42 - 12 | Based on information presented in the Draft RMP/EIS, the northern block of the Neacola Mountains may be appropriate for designation as part of the Neacola Mountains ACEC. During the 30-day public comment extension, EPA encourages the BLM to carefully consider additional public input regarding the relevance and importance of the northern block of the Neacola Mountains and its suitability for designation as part of the Neacola Mountains ACEC, and describe the decision-making process and ultimate outcome in the Final RMP/EIS. | BLM did acknowledge and evaluate this nomination as a substantive comment, as required by NEPA (40 CFR 1503.1). The nomination was considered as an alternative, but eliminated from further consideration (see Section 2.2). |
| 42 - 13 | We strongly support the BLM's planned efforts to work with federal, state and local agencies; future potential land owners; and the public to prepare activity plans for the proposed SRMAs and ACEC. | The implementation plans for special management areas provide a more focused opportunity for public and agency involvement in developing a more detailed management framework. |
| 42 - 15 | We encourage the BLM to continue planning efforts toward an environmentally protective strategy for that area, which 1) defines appropriate trails for OHV travel; 2) includes an effective monitoring and enforcement program; 3) limits or prohibits OHV use in sensitive habitat areas, areas of high value for quiet recreational pursuits and areas where effective monitoring and enforcement cannot be assured; and 4) commits to an effective and timely notification and education effort to inform the public. | Thank you for your comment. BLM will take these recommendations into consideration during the implementation level planning phase for the Knik River SRMA. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 43 - 12 | I live on the Chilkoot River. In the Ring of Fire presentation the Chilkoot drainage was suggested for a possible Wild and Scenic River designation. That would be excellent but I would also suggest that the Research Natural Area might be even better. | The Chilkoot River drainage is included in the Haines Block SRMA proposed under Alternatives C and D in the Proposed RMP/Final EIS. BLM considered the nomination of the Haines Block as an ACEC and the remaining lands as an RNA; however, BLM chose to assign the SRMA designation. In the interim, the State's Recordable Disclaimer of Interest Application for the Chilkoot River and Lake was been approved by BLM on February 1, 2006 (see text box on selected lands in Section 2.3.1.2 in the Proposed RMP/Final EIS). BLM no longer claims an interest in the submerged lands. |
| 43 - 18 | There is ongoing fisheries research on the river and lake. Anthony Crupi has done research on bears and bear/human interaction on the Chilkoot since 2000, with five years of data accumulated so far. I believe we could easily support a research designation. | Thank you, comment acknowledged. |
| 45 - 2 | We are writing in support of establishing a special use area in the Haines area (ACEC to be managed as a Research Natural Area) to study and protect mountain goats. | Please see responses to comments 34-27 under DOI/BLM Compliance. |
| 45 - 9 | AQRC urges BLM to designate the BLM-managed public lands in the Haines area as an Area of Critical Environmental Concern and manage it as a Research Natural Area for the purpose of protecting wildlife, especially mountain goats, by prohibiting helicopter, snowmachine and other mechanized intrusions. This will also allow an opportunity to obtain definitive data which in the future would permit the scientific management of mountain goats. Whether or where BLM could permit helicopter activity in the future would be determined for the first time, by the results of research on this specific goat population. In supporting LCC's request, we recognized that it is in conflict with designating the Haines Block as an SRMA and, accordingly, withdraw our previous support for that area to be a SRMA. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 50 - 2 | And I would recommend that very little restrictions be replaced on that area at this time. | Thank you for your comment. Under Alternative D, BLM is proposing the Neacola Mountains ACEC, south of Lake Chakachamna. BLM will establish use restrictions during the implementation-level planning for the ACEC following approval of the Proposed RMP/Final EIS. We will manage all lands within the planning area through the application of ROPs and/or stipulations, and the NEPA process associated with proposals to use these lands. |
| 50 - 4 | It's pretty good fishing there, and I really would recommend that opportunity be there for a certain amount of development. It's a huge area, and a few lodges or cabins are not going to detract from the area. I would appreciate your consideration in that. | See response to comment 50-2 under Special Management Areas. |
| 51 - 2 | I urge the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wild rivers, wilderness-quality landscapes, sensitive wildlife habitat, and other natural resources. | Although Alternative C is not BLM's Proposed Action, Alternative D would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, designate BLM-managed lands in the Knik River and Haines Block as Special Recreation Management Areas, and would delineate travel management for off-highway vehicle use as "Limited". |
| 51 - 4 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | <p>BLM recognizes the varied recreation opportunities that the Knik River Valley has to offer, and has assigned the "limited" OHV classification to the area. We intend to further define the management of the Knik River SRMA through the development of an implementation plan, which will incorporate the goals (Appendix F) for the SRMA. BLM is committed to working with all of the interested parties as part of its planning process.</p> <p>BLM will assess and manage areas and, if necessary, can use seasonal closures, off-sets, and trail designations to mitigate damage to sensitive areas. BLM may also, during the development of the implementation plan for the Knik River SRMA, determine that there are areas which should be managed to allow additional OHV use.</p> |

Special Management Areas

| Comment # | Comment | Response |
|-----------|--|---|
| 52 - 3 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands. | Appendix F in the Proposed RMP/Final EIS lists the proposed goals and management objectives for these two areas. The preferred decision for all areas within this plan is to delineate travel management for off-highway vehicle use as "Limited". This delineation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001). Implementation of limited use area designations for OHVs would be effective immediately after signature of the decision record. However, specific enforcement policies will be established during implementation-level planning, which will occur only after completion of the Proposed RMP/Final EIS. See also response to comment 11-4 under Off-Highway Vehicles. |
| 53 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | The Proposed Action (D) would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, but the Chilligan River tract would not be included in the ACEC. The boundaries of the Neacola Mountains ACEC are based on our analysis of the scenic and other resource values of the area. Other areas were considered but not included in the proposed ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable laws. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. |
| 53 - 3 | I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 53 - 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Thank you, comment acknowledged. The Proposed Action (D) would designate the Neacola Mountains as an ACEC with a VRM Class II. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 54 - 3 | We are concerned at the lack of designated Wild and Scenic Rivers and the lack of protection for the staircase area above Lake George. | BLM will continue to manage all lands over which we have responsibility, including in the area around Lake George, in a manner consistent with FLPMA and other applicable laws. |
| 54 - 4 | Regarding the Neacola Mountains ACEC: We encourage the designation of both blocks of Neacola Mountains area as ACEC, as depicted in the original RMP maps. The outstanding scenery, habitat and recreation values in the Chilligan and MacArthur River areas cannot be adequately protected without ACEC management. | Please see response to comment 53-2 under Special Management Areas. |
| 54 - 6 | Regarding the Haines Block SRMA: We support the designation of the Haines Block area as a SRMA. Furthermore, we support designating and managing the proposed Mountain Goat Monitoring and Control Area as a research natural area. SRMA designation alone will not provide adequate protections for mountain goats and other wildlife from the increasing recreational use of helicopters. | Please see response to comment 26-3 under Special Management Areas. |
| 55 - 2 | In the Haines area, I would like to see the Goat Monitoring and Control Area removed from the Haines block (which is to be managed for recreation) and be designated an Area of Critical Environmental Concern (ACEC) and be used as a Research Natural Area. A lot of data has been collected in this heli-free area that will be useful to compare to heli-used areas once the 10+ years of data is tabulated and studied. We need this area to remain a study area so that comparison studies can continue. | Please see response to comment 26-3 under Special Management Areas. See also response to comment 40-5 under Wildlife. |
| 55 - 5 | Please remove this area from the Haines Block and designate it for use as a permanent Research Natural Area. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 60 - 3 | I urge the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wild rivers, wilderness-quality landscapes, sensitive wildlife habitat, and other natural resources. | Please see response to comment 51-2 under Special Management Areas. |
| 60 - 5 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | Please see response to comment 52-3 under Special Management Areas. |
| 61 - 2 | I STRONGLY URGE. . . the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wild rivers, wilderness-quality landscapes, sensitive wildlife habitat, and other natural resources. | Please see response to comment 51-2 under Special Management Areas. |
| 61 - 4 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | See response to comment 52-3 under Special Management Areas. |
| 65 - 1 | I am writing to urge the BLM to adopt and implement the protective measures outlined in Alternatives C and D, including the proposed Knik River and Haines Area Special Recreation Management Areas and the proposed 229,000-acre Neacola Mountains and Blockade Glacier Area of Critical Environmental Concern, conservation measures that are part of its final resource management plan for Alaska's Ring of Fire area. | Thank you, comment acknowledged. Alternative D is BLM's Proposed Action. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 68 - 3 | A Research Natural Area (RNA) designation would promote biological diversity and opportunities for research and education. An ACEC/RNA that includes the current Monitoring and Control Area and BLM lands north of Glacier Bay would be ideal. | Please see response to comment 34-27 under DOI/BLM Compliance. |
| 69 - 1 | I am writing you in support of an ACEC for the Neacola Mountain blocks. | Please see response to comment 52-3 under Special Management Areas. |
| 70 - 2 | I am writing to ask that you manage it for scenic values and for the wildlife. | Please see response to comment 7-9 under Special Management Areas. |
| 70 - 3 | <p>It is my understanding that the BLM administers two blocks of lands in the Alaska Range: several hundred thousand acres of land in the Neacola Mountains and nearly a hundred thousand acres around the Chilligan River.</p> <p>As this proposal includes the Blockade Glacier and Shamrock Glacier above Chakachamna Lake and the Chilligan parcels that makes it even more important to protect for scenic values.</p> | Please see response to comment 53-2 under Special Management Areas. |
| 70 - 5 | Concerning the BLM Land Use Plan for the Ring of Fire region (1.3 million acres of coastal lands in AK), and your proposal to manage the Chilliagan and Neacolas as special areas with a focus on scenic values, such as wilderness quality, remoteness, and outstanding visual resources, as well as wildlife; I totally support this. I also support the nomination as ACEC (Area of Critical Environmental Concern). I know this would necessarily limit airplane use, hunting/fishing camps & access or lodges, or recreation. We need to recognize the outstanding values and prioritize values when considering future management actions of this area. | The Chilligan River tract would not be included in the ACEC. BLM will manage the resources associated with the Chilligan River and all other lands within the Ring of Fire planning area through the application of the ROPs and stipulations, and the NEPA process associated with proposals to use these lands. Please also see response to comment 51-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 71 - 3 | The RMP characterizes Haines Borough BLM lands as having "a particularly diverse and unique set of flora and fauna". Diverse and unique resources should be protected from increasing heli-supported recreation, and they are best protected through an ACEC/RNA designation. | Please see response to comment 26-3 under Special Management Areas. |
| 74 - 2 | I am pleased to see that the BLM has continued to designate the area as a monitoring area. However, I am concerned to note that the overall management designation for the surrounding area is that of a Special Resource Management Area (SRMA). | Please see response to comment 34-27 under DOI/BLM Compliance. |
| 74 - 4 | I believe that the monitoring area is important not only because it has provided, and will continue to provide, important baseline data for measuring the impacts of commercial recreational activity, but also because it holds the possibility of developing into an economic asset to the borough like the Chilkat Eagle Preserve. | Thank you for your comment. See response to comment 26-2 under Socioeconomics. Studies conducted in this area likely have provided useful data that could have multiple scientific applications. Also see response to comment 26-3 under Special Management Areas. |
| 74 - 5 | The SRMA designation for the area seems inappropriate. A SRMA is managed "to meet the strategically-targeted primary recreation market demand." (DEIS at 3-174, 174) A more appropriate designation would appear to be that of a Resource Natural Area (RNA), as part of an Area of Critical Environmental Concern (ACEC). An RNA is a particular ACEC that provides for biological diversity and opportunities for research and education. (DEIS at 3-173). | Please see response to comment 26-3 under Special Management Areas. |
| 75 - 2 | Therefore we urge the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wilderness, wildlife and natural resources. Protection of these incredible scenic resources and recreation opportunities for the enjoyment of future generations is absolutely necessary today. | Please see response to comment 51-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 75 - 3 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage, and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | The PRMP/FEIS lays the groundwork for determining what level of commercial recreation use might be appropriate for specific areas. It does this by identifying management objectives based on Recreation Opportunity Spectrum classes. The PRMP/FEIS also identifies, in Alternatives C and D, specific areas where commercial recreation use limits (including heli-skiing) would be established. Developing use limits for heli-skiing (or other commercial recreation activities) for a given area includes characterizing the area's user, knowing their tolerances for certain activities, and setting limits based on those tolerances; along with consideration of resource impacts, economic impacts, and safety concerns. See also response to comment 52-3 under Special Management Areas. |
| 79 - 5 | Special Management Areas- I am particularly interested in the proposed Haines/Skagway SRMA. | Thank you, comment acknowledged. |
| 79 - 10 | I am particularly concerned about the Chilkoot and Chilkat watersheds. There are increasing incursions into the interiors of these valleys, and such uses are having unforeseen impacts. Until future research and planning can provide a strong protection for the resources in these areas, I favor as much current protection in this area as possible to retain the greatest amount of potential for the future planning process. | Thank you for your comment. The Chilkat, Chilkoot, and Ferebee River valleys are within the Haines Block SRMA that is proposed under Alternatives C and D. BLM will determine use restrictions and resource protections during implementation level planning. |
| 80 - 4 | I believe that the alternative, D, proposed by the BLM is excessive and does not merit change. Jeff Denton and other state and BLM biologists have not done enough winter, (February-April) wildlife studies to merit substantial change. | See response to comment 16-2 in Special Management Areas. |
| 80 - 5 | I also believe portions of the monitoring control Area need to be opened to heliski operations. This mainly includes all alpine and glaciated terrain above tree line. | The subsequent implementation plan for the Haines Block SRMA will address landings, timing, and the effected resources, including mountain goats. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 80 - 6 | I will say as an operator that the preferred alternative, D, lends itself to much regulation without substantial winter wildlife impact data to merit any change. | Thank you, comment acknowledged. BLM has compiled mountain goat data gathered during this project. BLM will consider the data in the development of the implementation plan for the Haines area. More studies or further analysis may be forthcoming. |
| 81 - 2 | I support designating BLM lands north of Glacier Bay as an Area of Critical Environmental Concern to protect goat populations and other wildlife. | Please see responses to comments 34-20 under Special Management Areas and 34-27 under DOI/BLM Compliance. |
| 81 - 4 | Protecting the lands north of Glacier Bay would provide an important natural baseline for research that has already been lost elsewhere. | Thank you, comment acknowledged. |
| 82 - 2 | I would like skiplane access to continue for all glaciated zones of the Haines Block SRMA. | Thank you, comment acknowledged. See response to comment 80-5 under Special Management Areas. |
| 83 - 1 | I am writing in comment regarding the Haines Block Special management area and the future of its use. My interest in the geography from the Haines highway to Skagway is not commercial, but related to the tremendous recreational opportunities, specifically climbing and skiing in this area. I feel that first and foremost ski planes should be allowed to access this area for landings. The areas suitable for landing a ski plane are almost exclusively above 3000ft. Because of this I think that it is relatively unobtrusive to wildlife especially in light that these areas are mainly glaciated area without resident animals. Having spent 16 days on the upper Chilkat glacier we saw no animals or tracks in the surrounding area. Ski planes offer a very limited type of access during winter and spring months. | Please see response to comment 80-5 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 83 - 2 | In regard to helicopters I would suggest limited use during the winter and spring months, these are the months when the haines economy is starving and adventure sports are helping to improve buisness all around. | The Proposed RMP/Final EIS lays the groundwork for determining what level of commercial recreation use might be appropriate. An activity implementation plan would be developed for the Haines Block SRMA. BLM would work with all interested parties to outline a range of alternatives for management and to identify specific decisions regarding economic development, including commercial helicopter access. See also response to comment 80-5 under Special Management Areas. |
| 83 - 4 | In regard to the lower regions of this area (i.e. the Chilkat, Ferebee, Kelsall and surrounding drainages) I think significant policy must be implemented to protect the salmon habitat. Jet boats, timber harvests, and mining operations should not be allowed if they may jepordise the fish habitat. Too many people depend on the fish in these drainages to comrimise it. | Not all of the lands in the areas noted are managed by BLM. BLM is a multiple use agency and will attempt to balance the needs of various affected stakeholders on their designated lands. The PRMP/FEIS classifies lands for various purposes, but does not authorize any activities. Future proposals will be subject to the NEPA process and the application of the ROPs and stipulations. Proposals also require the completion of an ANILCA Section 810 evaluation that considers the potential impacts of the proposal on the lands and on the subsistence resources. |
| 84 - 4 | I have grave concerns with your plan to locate the "Mountain Goat Monitoring and Control Area" inside of the Special Recreational Management Area. This strategy seems to defy logic and good biological sense. If these high value resources merits "monitoring" and the creation of a "control area", certainly these areas must be separated from the impacts of recreational use. Your integration of the two designations, clearly negates the value of the intent to monitor and control for impacts. | Please see response to comment 26-3 under Special Management Areas. |
| 84 - 6 | The Mountain Goat Monitoring and Control area should be managed as both a Research Natural Area and an Area of Critical Environmental Concern. This status will ensure that, in future generations, as the area's economy changes, with new and potentially harmful impacts to goats, the areas goat populations—among the most robust in the world—will have the benefit of a valid control-habitat that allow scientific assessment of impacts to the surrounding regions. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 85 - 2 | I support the creation of the Neacola Mountains ACEC on the grounds that BLM should provide special management for special areas it manages and I assume the area meets the criteria for an ACEC. I lack personal knowledge of the area and suggest that the final version of the RMP/EIS contain sufficient information describing the area to support such a designation. | Please see response to comment 7-9 under Special Management Areas. |
| 85 - 3 | I have been made aware of, and have read, the application and supporting material submitted by Lynn Canal Conservation (LCC) to designate the Haines Block as an ACEC, to be managed as a RNA, for the protection of the mountain goat population. I find their submission to be very persuasive and believes it offers BLM a unique opportunity to do the necessary studies so that true scientific management of this species of wildlife could be achieved. | Please see responses to comments 26-3 under Special Management Areas and 34-27 under DOI/BLM Compliance. |
| 85 - 5 | Designating the area as an SRMA will encourage increased helicopter recreation/tourism and will mean that helicopter recreational/tourism needs will be the key determinant of BLM management actions. Accordingly, that means that the mountain goat population will have to accommodate this kind of traffic and landings. However, designating the area as an ACEC and managing it as a RNA will mean that helicopter recreation/tourism will have to accommodate itself to the needs of the mountain goats. | Please see response to comment 26-3 under Special Management Areas. |
| 85 - 6 | I do support the designation of the Knik River 80,000 acres as a SRMA provided that it is managed in a balanced fashion for both motorized and nonmotorized recreation. | See response to comment 11-4 under Off-Highway Vehicles. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 86 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | The Proposed Action (D) would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres an ACEC, but the Chilligan River tract would not be included in the ACEC. The boundaries of the Neacola Mountains ACEC are based on our analysis of the scenic and other resource values of the area. Other areas were considered but not included in the ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable laws. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. |
| 86 - 3 | I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 2 under Form Letter #2. Also, please reference the ACEC decision matrix in Section 2.2. |
| 87 - 2 | Our preference is for Alternative "C" for the following reasons: 1) We have been severely impacted by the "recreation-gone-wild" activities, including dust, nuisance noise from gun fire, airboats, dirt bikes, ATVs; danger from explosions, shooting in the woods, drive-by shootings, car burnings and fireworks. The trails and camping areas are littered with left-over nails from pallet and construction debris fires, glass from shot-up bottles and spent cartridges. | Please see responses to comments 9-2 and 11-4 under Off-Highway Vehicles. |
| 88 - 2 | I support the creation of the Haines Block Special Recreation Management Area. As well, it is imperative that the Goat Monitoring and Control Area (GMCA) in the Haines Block is kept though should be managed independently of the SRMA . Please consider creating an Area of Critical Environmental Concern (ACEC) or a Research Natural Area (RNA) designation for this area and the lands within the Chilkoot Lake and Ferebee River watersheds. Please consider the current GMCA lands and the BLM lands north of Glacier Bay National Park for inclusion in this ACEC/RNA area. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 88 - 3 | The people of the Haines Borough voted in 1996 to not allow summer helicopter tours, please respect this vote of the people by not permitting summer helicopter operations on BLM lands in the Haines Borough. | Please see response to comments 34-15 and 43-3 under Recreation. |
| 89 - 2 | I support the creation of the Haines Block Special Recreation Management Area. As well, the current Goat Monitoring and Control Area (GMCA) needs to be retained, but not inside the SRMA. | Please see response to comment 26-3 under Special Management Areas. |
| 89 - 3 | I suggest creating an Area of Critical Environmental Concern (ACEC) or a Research Natural Area (RNA) designation to promote biological diversity and opportunities for research and education which are so valuable to the tourism economy of Haines. | Thank you, comment acknowledged. BLM agrees that the area has remarkable natural attributes and opportunities for research and education. BLM has proposed the area would be managed as an SRMA; BLM would work with interested parties to develop integrated activity plans to manage the important resources in the area. See also response to comment 26-3 under Special Management Areas. |
| 89 - 4 | Please designate the current GMCA lands and the BLM lands north of Glacier Bay National Park for inclusion in this ACEC/RNA area. | Please see responses to comments 26-1 and 26-3 under Special Management Areas. |
| 89 - 5 | Please refrain from allowing summer helicopter tours and helicopter based-recreation on BLM lands in the Haines Borough. | Please see response to comments 34-15 and 43-3 under Recreation. |
| 90 - 2 | I support the creation of the Haines Block Special Recreation Management Area. As well, it is imperative that the Goat Monitoring and Control Area (GMCA) in the Haines Block is kept, though should be managed independently of the SRMA. Please consider creating an Area of Critical Environmental Concern (ACEC) or a Research Natural Area (RNA) designation for this area and the lands within the Chilkoot Lake and Ferebee River watersheds. Please consider the current GMCA lands and the BLM lands north of Glacier Bay National Park for inclusion in this ACEC/RNA area. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 90 - 3 | Please do not allow summer helicopter recreation. | Please see response to comments 34-15 and 43-3 under Recreation. |
| 91 - 1 | <p>I wish to support BLM's proposed Alternative D, to designate an Area of Critical Environmental Concern (ACEC), for the management of the BLM lands in the Neacola Mountains and Chilligan River area, near Chakachamna Lake, Alaska.</p> <p>I believe that despite these mountains' relative proximity to Anchorage, very few people have visited them. They fully deserve the management flexibility and protection that BLM's proposed Alternative D would offer this area, to recognize their unique wilderness and natural values.</p> | Please see response to comment 53-2 under Special Management Areas. |
| 91 - 3 | <p>Based on my fairly extensive on-the-ground experiences in the adjacent Tordrillo Range, I believe that all BLM lands in the Chakachamna Lake area should be managed as an Area of Critical Environmental concern, which will recognize their very high wilderness recreational values and their relatively untouched natural condition. This management proposal (BLM's Alternative D) should allow the relatively low levels of existing human activity in this area to continue, but should require more extensive analysis and planning by BLM, if new activities that would significantly alter the present solitude and de facto wilderness condition of this outstanding natural area are proposed in the future.</p> <p>I strongly believe that the unparalleled solitude and wilderness resources of this area should be recognized, managed and preserved for future generations of outdoor recreationists to enjoy. BLM's Alternative D will accomplish this better than any other management proposal being considered at the present time.</p> | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| Comment # | Comment | Response |
|-----------|--|---|
| 92 - 1 | <p>I am writing to comment on the proposed management of the "Goat Monitoring and Control Area" in the Haines vicinity. I am pleased to see that the BLM has continued to designate the area as a monitoring area. BUT, I am very concerned to note that the overall management designation for the surrounding area is that of a Special Resource Management Area (SRMA).</p> <p>The Goat Monitoring Area has been managed as such for over 10 years. There is a considerable amount of commercial tour helicopter activity on the Skagway side of the area (summer glacier tours some of which we know, is within the Haines Borough boundaries). We have yet to try to enforce that. The Haines Borough has recently passed ordinances to regulate commercial helicopter tour activity in the borough, and has respected and incorporated the monitoring area. We have spent to past 6 years trying to work out a regulatory procedure that is acceptable to the majority. I think that has finally occurred. Let's not go backwards and toss all that hard work to the wind, for the words of a few.</p> | Please see response to comment 26-3 under Special Management Areas. |
| 92 - 2 | <p>The continuation of monitoring the area is important not only because it has provided, and will continue to provide, important baseline data for measuring the impacts of commercial recreational activity, but also because it holds the possibility of developing into an economic asset to the Haines borough.</p> | Please see response to comment 26-2 under Socioeconomics. |
| 92 - 4 | <p>The SRMA designation is inappropriate, and I totally disagree with it. A SRMA is managed "to meet the strategically-targeted primary recreation market demand." Anyone can hire a helicopter, and claim they have a lucrative business. That is not a basis to change an already known and thoroughly studied wildlife area, and hunting resource, and turn it into a recreational area for the rich and elite. A more appropriate designation would appear to be that of a Resource Natural Area (RNA), as part of an Area of Critical Environmental Concern (ACEC). An RNA is a particular ACEC that provides for biological diversity and opportunities for research and education. (DEIS at 3-173).</p> | Please see response to comment 26-3 under Special Management Areas. |
| 93 - 1 | <p>As a 30 year Alaskan and outdoor enthusiast I support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP.</p> | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 93 - 2 | I encourage BLM to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 94 - 2 | I support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 94 - 3 | I encourage BLM to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 70-5 under Special Management Areas. |
| 98 - 1 | In the 2004 BLM Ring of Fire scoping process, our organizations supported creating an Area of Critical Environmental Concern, Research Natural Area (ACEC/RNA) to protect mountain goats in the Haines Block from impacts of helicopter-supported recreation. We continue to believe an ACEC/RNA designation would best protect the significant mountain goat resources in this area identified in the Ring of Fire draft environmental impact statement (DEIS). | Please see response to comment 26-3 under Special Management Areas. |
| 98 - 2 | We fully support retaining the Mountain Goat Monitoring and Control Area created in 2002. Protecting and preserving goats is best achieved through an ACEC/RNA designation and cannot be achieved if the existing Monitoring and Control Area is placed inside a Special Recreation Management Area (SRMA), as would occur under BLM's preferred alternative. A SRMA is managed to meet the market demand for recreation, which the DEIS identifies as helicopter-supported. This conflicts with the management intent of a Goat Monitoring and Control Area - to act as a control against which impacts of helicopter-supported recreation can be measured. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 98 - 3 | Analyzing ten years of goat monitoring data that BLM has for the Haines Block is a necessary preliminary step to understanding impacts. Placing the existing Monitoring and Control Area inside an ACEC/RNA will allow much needed, in-depth research to occur and give land managers the tools they need to manage helicopter-supported activity in goat habitat throughout Alaska. | See response to comment 26-3 under Special Management Areas. See also response to comment 34-11 under DOI/BLM Compliance. |
| 99 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 99 - 3 | I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 100 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 100 - 3 | I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 101 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 101 - 3 | Today I encourage you to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 102 - 1 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. The newer map, with 143,000 less acres is unacceptable. | Please see response to comment 53-2 under Special Management Areas. |
| 103 - 1 | As someone who is very concerned with protecting our country's wild public lands and a 43 resident of Alaska, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 104 - 2 | As someone who is very concerned with protecting our country's wild public lands, I urge you to support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 104 - 3 | I STRONGLY URGE YOU. . . to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 106 - 2 | I support the proposed Neacola Mountains ACEC as depicted in the original maps included in the draft Ring of Fire RMP. Reducing the amount of included land as currently proposed is unacceptable. | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 106 - 3 | I encourage the BLM to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 107 - 2 | I support the proposed Neacola Mountains ACEC, as depicted in the original maps included in the draft Ring of Fire RMP. | Please see response to comment 53-2 under Special Management Areas. |
| 107 - 3 | I encourage BLM to include the Chilligan River and McArthur River tracts in the proposed ACEC. I believe that the outstanding scenery and resource values of these lands, as well as the Blockade Glacier and Lake, warrant the enhanced protections from visually disruptive activities that ACEC management would provide. | Please see response to comment 53-2 under Special Management Areas. |
| 108 - 2 | I support designating the Neacola Mountains ACEC for the preservation of scenic values on the Blockade Glacier tract. However, I am disappointed by the elimination of 143,000 acres. The original map proposal for 372,000 acres received unanimous public support during the comment period and hearings, according to BLM. | Please see response to comment 53-2 under Special Management Areas. |
| 108 - 3 | Because of the outstanding public resources present within the Chilligan River block, I believe it deserves special ACEC management attention as well. Wildlife is abundant in this area which provides important migration corridors and habitat for dall sheep, brown and black bears, moose, and bald eagles, as well as spawning habitat for salmon. There are also many recreation opportunities, typically accessed by small aircraft, feature sport hunting, kayaking, and hiking. Adventurous ice climbers and skiers have immersed themselves in these wild lands and rivers for decades, all within direct sight of Anchorage. | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 108 - 4 | I would like to go on record as supporting preservation of all 372,000 acres. | Please see response to comment 53-2 under Special Management Areas. |
| 109 - 2 | I support the proposed Neacola Mountains ACEC zoned in the Ring of Fire RMP. Other areas I would like to see included are the Chilligan River and McArthur River tracts in the proposed ACEC. The Blockade Lake and glacier area also deserves protection that could be offered by the ACEC. | Please see response to comment 53-2 under Special Management Areas. |
| 110 - 2 | In general we support the designation of the north and south block of the Neacola Mountains ACEC, the Haines Block SRMA, and the Knik River SRMA. | The Proposed Action (D) would designate the Neacola Mountains - Blockade Glacier tract of 229,000 acres as an ACEC, designate BLM lands in the Knik River and Haines Block as Special Recreation Management Areas. The Chilligan River tract would not be included in the ACEC (see Section 2.2). |
| 110 - 4 | Regarding the Neacola Mountains ACEC: We encourage the designation of both blocks of Neacola Mountains area as ACEC, as depicted in the original RMP maps. The outstanding scenery, habitat and recreation values in the Chilligan and MacArthur River areas cannot be adequately protected without ACEC management. | Please see response to comment 53-2 under Special Management Areas. |
| 110 - 6 | Regarding the Haines Block SRMA: We support the designation of the Haines Block area as a SRMA. Furthermore, we support designating and managing the proposed Mountain Goat Monitoring and Control Area as a research natural area. SRMA designation alone will not provide adequate protections for mountain goats and other wildlife from the increasing recreational use of helicopters. | Please see response to comment 26-3 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 110 - 7 | <p>Regarding the Knik River SRMA:</p> <p>This area is well known and used for non-motorized recreation by our local members. The lack of trail inventory and assessment on BLM lands requires a more conservative approach than the “generally allowed uses on state land” on “existing roads and trails” that is proposed. The current level and quality of ORV use in this area is not sustainable and is causing substantial degradation of fish, wildlife and recreational resources.</p> | Please see responses to comments 11-4, 12- 4, and 54-8 under Off-Highway Vehicles. |
| 111 - 2 | <p>There should be a goat monitoring and control area , ACEC/RNA, that is not inside a SRMA that has no mandate for wildlife protection. PLEASE DESIGNATE THE EXISTING MOUNTAIN GOAT MONITORING AND CONTROL AREA AS AN ACEC. Designating BLM lands on the north of Glacier Bay National Park as ACEC/RNA would also protect this highly sensitive area from summer heli supported activity.</p> | Please see response to comment 26-3 under Special Management Areas. |
| 111 - 3 | <p>Honor the heli-ski map adopted by the Haines Borough Assembly by REMOVING TAKIN RIDGE LANDINGS FROM BLM PERMITS.</p> | Please see response to comment 80-5 under Special Management Areas. |
| 111 - 5 | <p>PLEASE ADOPT NWSGC RECCOMENDATIONS WHEN ISSUING PERMITS THAT ACCESS BLM LANDS BY HELICOPTER.</p> | Please see response to comments 34-15 and 43-3 under Recreation. |
| 112 - 5 | <p>We support the Knik River SRMA concept as long as its purpose is to manage these lands in the spirit of the pending State Knik River Public Use Area legislation. The AOAA believes that South Central Alaska needs a place designated for motorized recreation. The proposed Knik River Public Use Area maintains the Knik River as a suitable destination for motorized recreation. We would like the draft RMP regarding the Knik River SRMA reflect that purpose as well.</p> | Please see response to comment 29-4 under Special Management Areas. |

Special Management Areas

| Comment # | Comment | Response |
|-----------|--|--|
| 113 - 12 | <p>Protect the Chilligan and McArthur Rivers as part of Neacola ACEC</p> <p>American Rivers strongly urges the BLM to adopt the boundaries for the proposed Neacola ACEC as laid out in the original map published in the RMP and not the smaller, revised version. There has never been adequate clarification as to why the ACEC was scaled back, and the larger Neacola ACEC would protect some truly outstanding river segments. We strongly urge BLM to include the 143,000 acre northern tract, which contains the Chilligan River, in the Neacola Mountains ACEC.</p> | Please see response to comment 53-2 under Special Management Areas. |
| 113 - 13 | <p>As you know, the Chilligan River watershed is jointly managed by the BLM and the National Park Service (NPS). The 18 river miles managed by NPS were declared eligible for designation as a National Wild and Scenic River in a 1993 study, with a tentative classification as "Wild" for the protection of scenic values. The Draft Ring of Fire RMP/EIS also finds the BLM-managed segments of the Chilligan River to possess outstandingly remarkable scenic and wildlife values, and thereby also eligible for Wild and Scenic River status. These values should be protected regardless of the ultimate suitability determination for the Chilligan due to its continuity with the NPS' portion of the river. Assignment of an appropriate alternative administrative designation, such as inclusion within the Neacola Mountains ACEC or Outstanding Natural Area (ONA), would help to ensure protective management of the Chilligan River's identified ORVs.</p> | Thank you, comment acknowledged. The Chilligan Block was considered but not included in the proposed ACEC (see Section 2.2 for further explanation). The boundaries of the Neacola ACEC are based on our analysis of the scenic and other resource values of the area. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies. |
| 113 - 14 | <p>Along with the Alaska Coalition, American Rivers also believes that the northern Chilligan River tract should be included in the Neacola Mountains ACEC due to its outstanding wildlife habitat, as well as its available opportunities for commercial and private recreation. This 143,000 acre tract serves as a critical wildlife travel corridors, as well as year-round habitat.</p> | Please see response to comment 53-2 under Special Management Areas. |
| 113 - 15 | <p>According to the original Figure 2.3-3 map, it appears that this tract was considered for inclusion in the ACEC in the initial stages of this Draft RMP/EIS, however BLM provided no explanation for its eventual exclusion. We request that this omission be corrected.</p> | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 113 - 16 | Finally, we also request that BLM include, and provide interim protection for, the 64,000 acres of state-selected lands along the McArthur River as part of the Neacola Mountains ACEC. Due to the uncertainty of future land conveyances, we support providing interim protection for the McArthur River lands consistent with the management objectives of the proposed Neacola Mountains ACEC. According to the September 2005 State of Alaska selection priority map, it appears that this parcel is not prioritized for conveyance. If state selections on the McArthur River lands are ultimately relinquished, we support permanently including these lands within the boundaries of the Neacola Mountains ACEC. | Please see response to comment 53-2 under Special Management Areas. |
| 114 - 2 | I would like to say that of the proposed alternatives I would prefer C, the Resource Conservation model. However, even in this alternative the BLM administered land in the Haines area would be designated an SRMA and there seems to be at this point no indication that critical goat habitat would be protected. The potential is there for completely unrestricted heliskiing and summer helicopter tours, which would scuttle ADF&G's work in the study area along the Ferrebee Ridge. It would also run contrary to advisory votes in the Haines that showed the community would prefer that helicopter activity be closely controlled. | Please see response to comment 26-3 under Special Management Areas. |
| 115 - 2 | I absolutely support your EIS findings that propose to manage the Chilligan and Neacolas as special areas with a focus on scenic values, such as wilderness quality, remoteness, and outstanding visual resources, as well as wildlife for the Chilligan. I believe that this amazing area deserves its status as ACEC and justly limits airplane use, hunting/fishing camps & access or lodges, or recreation. | Please see response to comment 53-2 under Special Management Areas. |
| 118 - 2 | I urge the BLM to adopt the protective measures outlined in Alternative C, including the creation of new Special Recreation Management Areas, and especially the Neacola Mountains Area of Critical Environmental Concern, in order to protect our wild rivers, wilderness-quality landscapes, sensitive wildlife habitat, and other natural resources. | Please see response to comment 51-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 118 - 4 | The proposed Knik River and Haines Area Special Recreation Management Areas also afford an excellent opportunity to protect recreation opportunities, as well as mountain goat habitat. I think it's crucial that these management objectives emphasize enforcement of responsible regulations for commercial tourism and off-highway vehicle usage and take strong steps to minimize adverse impacts to wildlife and wild lands associated with these activities. | See response to comment 52-3 under Special Management Areas. |
| 119 - 10 | The national demand for outdoor recreation and open spaces in Alaska is constantly rising due to the growing resident population and increasing number of tourism visitors to the state. A July 26, 2005, article in The New York Times titled "Race to Alaska Before it Melts," states that many people plan to visit Alaska in the immediate future, "before it disappears" due to the consequences of global warming on our climate, wildlife habitat, and traditional way of life. We hope that BLM also will acknowledge the values of a sustainable approach to using public lands by adopting protective benefit-based management objectives in the Final RMP/EIS that fairly support the needs of all of the users of the southern Alaska BLM lands. | Thank you, comment acknowledged. |
| 119 - 13 | We urge BLM to adopt strong protective management directives for each of the special areas proposed in the Draft RMP/EIS in a responsible effort to strike a balance between conservation and development of the Ring of Fire area's public resources. | Thank you, comment acknowledged. BLM is required by FLPMA to manage public lands for multiple uses, and the PRMP/FEIS provides the guidance to uphold this mandate. Through implementation level planning, BLM will manage to maintain a range of recreation opportunities, conservation efforts, and resource development. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. |
| 119 - 14 | We strongly support the proposed Neacola Mountains ACEC, particularly the alternative depicted in Figure 2.3-3 of the Draft RMP/EIS. We believe that the area's outstanding scenic, recreation, and wildlife values, in addition to the unselected status of these large tracts of lands warrant BLM's commitment of long-term, special attention to the management of these public resources. We commend BLM for responding with special consideration to our August 2004 scoping nomination for the Neacola Mountains ACEC (see attached ACEC Scoping Nominations). We also appreciate the work of Gary Reimer and the BLM staff in professionally championing this conservation-minded effort, which the general public has strongly supported. | Please see response to comment 53-2 under Special Management Areas. |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 16 | <p>We strongly urge BLM to include the 143,000 acre northern tract, which contains the Chilligan River, in the Neacola Mountains ACEC. We nominated this parcel in our scoping comments and nomination packet for study and designation as an ACEC. We also nominated the 229,000 acres of the southern tract, which contains the Blockade Glacier. Our research, then and now, indicates that both tracts of land qualify for and are deserving of ACEC status.</p> | <p>Please see response to comment 53-2 under Special Management Areas. BLM will consider the management of the adjoining lands and attempt to be as consistent in our management as allowed by our policies.</p> |
| 119 - 19 | <p>We also believe that the northern Chilligan River tract should be included in the Neacola Mountains ACEC due to the above mentioned wildlife habitat, as well as its available opportunities for commercial and private recreation. This 143,000 acre tract serves as a critical wildlife travel corridor, as well as year-round habitat. It is more frequently visited by the public for hunting and recreation activities, both commercial and non-commercial, than the Blockade Glacier tract. The Chilligan River tract was nominated for ACEC designation in our scoping comments and, according to the original Figure 2.3-3 map, it appears that this tract was considered for inclusion in the ACEC in the initial stages of this Draft RMP/EIS. Moreover, BLM provided no explanation for its exclusion from the Draft RMP/EIS. We request that BLM correct this omission.</p> <p>We understand from discussions with Mr. Reimer that an individual who testified at the public hearing in Palmer on December 8, 2005, requested the establishment of public-use cabins within the "Neacola Mountains ACEC." This is just one example of an individual expressing support for the original Neacola Mountains ACEC designation proposal and special management provisions that include the Chilligan River tract (we assume that the individual was not requesting construction of public use cabins upon the Blockade Glacier). Because of the misleading depictions of the original maps of the proposed ACEC, as noted above, we believe that it would be appropriate for BLM to consider all such comments submitted by the original comment deadline as evidence of the public's support for including all 372,000 acres (both the Blockade Glacier and Chilligan River tracts) in the Neacola Mountains ACEC.</p> | <p>Please see response to comment 53-2 under Special Management Areas.</p> |

Special Management Areas

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 20 | <p>We also request that BLM include, and provide interim protection for, the 64,000 acres of state-selected lands along the McArthur River, adjacent to the Blockade Glacier tract, as part of the Neacola Mountains ACEC. Due to the uncertainty of future land conveyances, we support providing interim protection for the McArthur River lands consistent with the management objectives of the proposed Neacola Mountains ACEC. According to the September 2005 State of Alaska selection priority map, it appears that this parcel is not prioritized for conveyance. If state selections on the McArthur River lands are ultimately relinquished, we support permanently including these lands within the boundaries of the Neacola Mountains ACEC.</p> <p>As described in supplemental documents provided Mr. Lloyd, the McArthur River possesses ORVs and is eligible for Wild and Scenic designation:</p> <p>"Outstanding and Remarkable Values have been identified for wildlife and ecological function. These include high value moose winter areas and post rutting habitat. The south facing slopes that overshadow the river are high value feeding and denning areas for bears. This is also a known trumpeter swan and shore bird nesting area. These habitat areas are ecologically unique and important to these wildlife values. This river does received some commercial (hunting via airboat) and non-commercial use (float boaters) during the summer and fall months."</p> <p>Source: December 20, 2005, BLM email from Robert Lloyd to Melissa Blair.</p> <p>We were surprised to see that none of the alternatives in the Draft RMP/EIS included a proposal that the Chilligan Block or the McArthur River lands be included in the Neacola Mountains ACEC. We hope that BLM will reconsider this decision.</p> | <p>Please see response to comment 16-13 under Lands and Realty. The boundaries of the Neacola Mountains ACEC are based on our analysis of the scenic and other resource values of the area. Other areas were considered but not included in the proposed ACEC. BLM will continue to manage all lands over which we have responsibility in a manner consistent with the requirements of FLPMA and other applicable law. BLM will manage the resources associated with the Chilligan River and all other lands within the planning area through the application of the ROPs and stipulations, and the NEPA process associated with BLM processing of proposals to use the lands.</p> |
| 119 - 21 | <p>BLM should consider the proposed Neacola Mountains ACEC for potential designation as an ONA or as a National Scenic Area (NSA). These designations may be even more appropriately tailored for allocating special management attention to the area's scenic, recreation and wildlife resources, than the ACEC designation.</p> | <p>See response to comment 27-7 in Coordination and Compatibility.</p> |

Special Management Areas

| Comment # | Comment | Response |
|-----------|--|---|
| 119 - 36 | <p>The State of Alaska is currently considering building a road to the proposed Pebble Gold-Copper Project (see attached map). The planning documents for this proposed mine identify Iniskin Bay as the desired location for a new deep water port (Port Site 1). If this road and deep water port are developed, the new access, activity, and human presence within this pristine river valley will likely have devastating impacts on the wild nature of the area and on previously undisturbed brown bear habitat. As the mining companies (and State of Alaska) proceed with plans to develop and provide infrastructure for the proposed Pebble Gold-Copper Mine Project, threats to the incredible wildlife resources of Iniskin River are becoming tangible and in critical need of management.</p> <p>We request an ACEC designation for the BLM-managed portion of the Iniskin River to recognize the significance of the wildlife, scenery, and recreation values along the river, in addition to providing necessary protections from the critical threats posed by the potential Pebble Gold-Copper mining district's road and port development.</p> | <p>The Iniskin River was considered for ACEC designation, but eliminated from further analysis for reasons discussed in Section 2.2. BLM will retain a very small part, if any, of the Iniskin River; future actions are subject to the application of the ROPs and stipulations as appropriate and will have to go through the NEPA process, which may develop mitigation measures related to the potential impacts of the activity being considered.</p> <p>The Pebble Mine Project is subject to NEPA requirements; therefore, all potential direct, indirect, and cumulative impacts to Iniskin Bay and the surrounding area will be analyzed for each proposed development during the planning phase of each development.</p> |
| 119 - 38 | <p>In its preferred alternative, BLM also refrained from making formal designations for OHV use within the proposed Knik River SRMA, the proposed Haines Block SRMA, and the proposed Neacola Mountains ACEC. As justification for the lack of designations in these areas, BLM stated that OHV use will be defined through the eventual development of state activity plans. Until the Special Management Areas (SMA) are finalized and a plan is developed, however, BLM must manage OHVs in these areas in a manner consistent with FLPMA, Executive Orders 11644 and 11989, and 43 C.F.R. Part 8340, and BLM must develop an interim management plan to ensure that OHV use will not adversely impact wildlife, vegetation, soil, and other natural and culture resources in these areas. A date and timetable for the process and completion of Travel Management Planning and implementation level plans should be clearly stated in the Final RMP/EIS.</p> | <p>The Proposed Action (D) for all BLM-managed lands within the planning area is to delineate travel management for off-highway vehicle use as "limited." This delineation will limit use to existing roads and trails (National Mgt. Strategy for Motorized OHV Use on Public Lands, DOI, January 2001). Implementation of limited use area designations for OHVs would be effective immediately after signature of the decision record.</p> <p>Additional or site-specific Travel Management Planning will be addressed within implementation plans for SMAs, which are produced after the PRMP/FEIS is approved. Through the development of implementation plans, produced with public involvement, resources may receive further levels of necessary protection from OHV use.</p> <p>It is not practical to define within the Ring of Fire Proposed RMP/Final EIS a specific date or timetable of when future activity-level plans would be processed. Per BLM policy, this work normally should be completed within five years of the signing of the ROD (BLM Land Use Planning Handbook - 1601, Comprehensive Trails & Travel Management, 3/11/06).</p> |

Special Management Areas

| Comment # | Comment | Response |
|-----------|---|---|
| 119 - 46 | <p>The Knik River watershed originates high in the Chugach Range and slowly flows toward Knik Arm. This area supports streams filled with salmon, migrating birds, large mammals, glaciers, rivers, lakes and spectacular mountain scenery. It is an area that has an amazing variety of biodiversity, and a numerous recreational opportunities. It is a place that in the past has been nominated for National Park status, and probably in any other state it would be a prize park. This is an area that faces several challenges, highlighted by unruly behavior and irresponsible OHV use. Strong management and good planning are sorely needed in the Knik area.</p> <p>We are happy to see BLM propose in its Preferred Alternative (Alternative D) the Knik River SRMA. BLM lands at the headwaters of the Knik River watershed could be a world-class recreational destination, but BLM must properly manage these lands and contain OHV use to appropriate areas. This area is currently under heavy pressure from unregulated OHV use. We would welcome BLM's management of OHV use, accompanied by planning, and we look forward to being part of this planning process. We urge that this process begin as soon as possible.</p> | <p>Please see response to comment 11-4 under Off-Highway Vehicles.</p> |
| 119 - 51 | <p>In compliance with its multiple-use mandate, we request that BLM immediately and actively manage and protect the diverse spectrum of high quality recreation opportunities, including kayaking, canoeing, hiking, and wildlife-viewing, that currently exist on BLM-managed lands in the Knik River drainage, regardless of land status. User group conflict is a major problem along the Knik. We request that BLM also work with Knik River Watershed Group to develop a community-based management plan for the Knik River SRMA.</p> | <p>Thank you, comment acknowledged. BLM is committed to work with all interested parties in developing the implementation plan for this area. BLM is required by FLPMA to manage public lands for multiple uses, and the PRMP/FEIS provides the guidance to uphold this mandate. Through implementation level plans, BLM will manage to maintain a range of recreation opportunities, including those you've listed. It is also BLM's intent to work with all of the interested parties in an effort to minimize user conflicts.</p> <p>We intend to further define the management of the Knik area through the development of an implementation plan, which incorporates the goals (stated in Appendix F of the Proposed RMP/Final EIS) for the Knik River SRMA. BLM is committed to working with all of the interested parties as part of its planning process.</p> |

Special Management Areas

| Comment # | Comment | Response |
|---|--|---|
| 119 - 54 | <p>An ACEC is created to enhance resource values and an RNA is created to provide biological diversity and opportunities for research and education. Id. at 3-173. More specifically, an ACEC is an area "where special management attention is required to protect and prevent irreparable damage to important . . . wildlife resources." Id.</p> <p>On the other hand, an SRMA is created to be managed for recreational values and includes no mandate for protecting wildlife resources. Id. Specifically, an SRMA provides different recreational niches "to meet the strategically-targeted primary recreation market demand." Id. at 3-174. While an SRMA is the appropriate management tool for recreational use of the area, it is not an appropriate management tool for conserving and protecting wildlife values. Considering BLM's anticipation of increased demand for helicopter-supported recreation, BLM would be hard pressed to manage an SRMA that includes a Monitoring and Control Area because there is an inherent conflict between the demand for new landing areas and protecting an area from that same recreational activity. It would be more appropriate for BLM to institute the management scheme that would provide for the protection of wildlife and wildlife habitat. This would be an ACEC/RNA. Thus, we believe that the Haines Block should include two special management areas: an SRMA to protect existing recreational uses in the northern half of the proposed SRMA, and an ACEC/RNA for the designated Monitoring & Control Area and remaining Haines Block lands.</p> | Please see response to comment 26-3 under Special Management Areas. |
| <i>End of section on Special Management Areas</i> | | |

Socioeconomics

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 5 - 2 | 10, 20, 30 years ago when there was just a few people living in the valley anybody could basically go out and do just about anything they wanted, and it had very little impact on the land. Today there's a lot of people, there's a lot of people that come in from the outside. There's a lot of impact on the land. This is my concern. | Thank you, comment acknowledged. |
| 20 - 3 | Over the years, the communities of Haines and Skagway have experienced difficult economic periods including the present time. Resource development would greatly assist in diversifying their economies. Therefore, Sealaska urges that the greatest flexibility be implemented to explore and develop minerals while providing statutory protection for air and water resources. | BLM is a multiple-use agency and as such is tasked with considering a variety of proposals on public lands. Potential mineral activities would be analyzed in future implementation plans, and in accordance with NEPA. In addition, mineral development would require a Plan of Operations, containing site specific ROPs and stipulations. Federal and state laws would also apply to mineral development in this area. |
| 26 - 2 | I believe that the monitoring area is important not only because it has provided, and will continue to provide, important baseline data for measuring the impacts of commercial recreational activity, but also because it holds the possibility of developing into an economic asset to the borough like the Chilkat Eagle Preserve. | Thank you, comment acknowledged. The Haines area has developed a diversity of important resource-based tourism opportunities. The BLM acknowledges the potential for future resource-based economic development opportunities in the area. Implementation plans would analyze alternatives for specific proposals in the Haines Block SRMA in the future. |
| 43 - 14 | When we first came here in 1985 there was only a gravel road and no tourism. Now the road is paved and tourism growth has pretty much exploded. In 2002 tourism to the Chilkoot, mostly to view brown bears and mountain goats, was estimated to bring in about two and a half million dollars into Haines and it's continued to rise. | Thank you, comment acknowledged. |

End of section on Socioeconomics

Subsistence

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 45 | In addition, we recommend that each of the proposed SRMAs are specifically managed to mitigate any impacts from recreational use upon subsistence resources. | SRMAs are areas with high actual and potential levels of recreational use, on which special measures are taken to monitor and reduce impacts to stream banks, vegetation, and fish and wildlife resources. The Haines Block SRMA in the Southeast planning region and the Knik River SRMA in Southcentral are both located on State-selected lands, on which the ANILCA Title VIII Federal subsistence priority does not apply. As a result, protection of habitat and fish and wildlife resources benefits local hunting and fishing, but there is no legal mandate to provide a Federal subsistence priority on these two specific areas. |
| 119 - 71 | In the Draft RMP/EIS, BLM failed to provide adequate foundation for its threshold, or tier-I, subsistence analyses for any of the four alternatives. It failed to provide sufficient detail about the anticipated activities that would occur under each of the four alternatives, and how those activities would impact subsistence resources and access in the planning area as a whole, much less in any particular area. BLM thus failed to adequately support its conclusion that none of the alternatives would impose a significant restriction on subsistence uses and resources. This analysis does not comply with BLM's mandates under the Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). | More detailed information on development activities is found in the subject matter sections in the Proposed RMP/Final EIS, and this was the basis for the conclusions drawn in the Section 810 analysis. As an example, Appendix G provides a detailed account of oil and gas resource and development potential, supporting the estimate of 2600 acres affected. Additional discussion of development activities in each of the planning areas was taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis included in the PRMP/FEIS. A regional level of analysis examining four planning regions within the larger planning area is appropriate for the purposes of the plan. In particular, since estimates of potential developments generally lack site-specific parameters at this stage of planning, it is not possible to conduct site-specific analyses of development activities in relation to the small, dispersed BLM unencumbered land and the extensive community subsistence use areas. Site-specific environmental reviews will, however, accompany project permit applications when those occur. In all, at this stage of planning, it is appropriate and reasonable to conclude that low development potential (affecting low total acreage) dispersed across the large planning regions will effect no more than a few percent of village traditional subsistence use areas. This does not constitute a significant restriction on subsistence resources, uses, or access. |

Subsistence

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 72 | <p>The section of the Draft RMP/EIS that explained the direct and indirect effects on subsistence common to all alternatives was stunningly lacking in detail. For example, although the subsection on leasable, locatable and salable minerals indicated that exploration and prospecting activity would negatively impact subsistence, it failed to provide any detailed analysis of what those impacts would be. This subsection also failed to provide a meaningful discussion of the amount of exploration, prospecting, blasting, road building, or competition that may occur as a result of these activities.</p> <p>Similarly, the subsection on forestry management found that the impacts of the planned activities would “be minor in scale.” However, this subsection failed to provide a meaningful discussion of the amount of habitat modification or herbicide and insecticide application that is likely to occur. Nor did it indicate where those activities would take place or how repeated or widespread they would be. It contained no detailed analysis of how or to what extent they would negatively impact subsistence.</p> | <p>More detailed information on development activities is found in the subject matter sections in the Proposed RMP/Final EIS, and this was the basis for the conclusions drawn in the Section 810 analysis. Appendix G provides a detailed account of oil and gas resource and development potential, supporting the estimate of 2600 acres affected. Discussion of the likely extent of timber development is found in Section 4.2.4, supporting the estimate of 20 acres disturbance per year, primarily on BLM lands in the Matanuska-Susitna Valley and the Kenai Peninsula, with little road construction activity. Based on the low resource potential and historic rates of activity, the planning estimate does not predict intensive silviculture applications, such as herbicide and insecticide. Additional discussion of development activities, broken out for the four planning regions, was taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis. The underlying analysis of no significant impacts remains justified.</p> |
| 119 - 73 | <p>Pursuant to ANILCA § 810, BLM is required to evaluate whether its land-use decisions in Alaska will significantly restrict subsistence uses and resources, to consider alternatives, and to minimize impacts on subsistence. BLM, however, failed to provide adequate foundation for this “tier-I” subsistence analyses.</p> | <p>The Section 810 analysis evaluated the potential to significantly restrict subsistence uses on BLM unencumbered lands, based on the subject matter expert accounts of likely key development activities (minerals, timber, OHV) and impacts to key subsistence resources, (fisheries and aquatic habitat, and wildlife). Additional discussion of development activities, broken out for the four planning regions, was taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis of the PRMP/FEIS. The underlying analysis of no significant impacts remains justified.</p> |

Subsistence

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 74 | <p>BLM provided substantial discussion and analysis of subsistence activities in the planning area, i.e., it specified where these activities take place, historically and presently, the important subsistence species in each local area, what access is required, and the nature of the subsistence uses and resources. It also stated that under all alternatives and the cumulative case "[t]imber development, realty actions to grant rights-of-way (ROW), mineral development, OHV management, and growing recreation, all have the potential to adversely affect subsistence uses." Draft RMP/EIS at I-5. BLM then ignored the question of how these activities, individually or cumulatively, would impact subsistence use and access on local levels (as opposed to the planning area as a whole). Because subsistence is a local activity, this localized information is critical to a proper analysis.</p> <p>At a minimum BLM should have described where the proposed activities, such as timber development, realty actions to grant rights-of-way, mineral development, OHV management, and growing recreation would occur in relation to subsistence resources and activities. For each of the alternatives, BLM should have analyzed and discussed the extent to which these activities would conflict with subsistence uses, resources and access. It failed to do so.</p> | <p>The comment rightly quotes the Section 810 analysis noting the general potential for many activities to restrict subsistence uses, but neglects the subsequent qualification that the "extent of these effects depends upon the configuration of BLM-management lands in relation to community subsistence use areas, BLM management actions to authorize or regulate activities, and the resource potential to support development" (Appendix I). More detailed information on the scale and configuration of development activities is found in the subject matter sections in the Proposed RMP/Final EIS, and this was the basis for the conclusions drawn in the Section 810 analysis. As an example, Appendix G provides a detailed account of the oil and gas resource and development potential, supporting the estimate of 2600 acres affected. Additional discussions of development activities in each of the planning areas were taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis in the PRMP/FEIS. A regional level of analysis, for the four planning regions, is appropriate for the purposes of the plan. Site-specific analyses of development activities in relation to the small portion of BLM unencumbered land and the extensive community subsistence use areas cannot be performed for the non-site specific estimates of development activities. Site-specific environmental review would accompany project permit applications when those occur.</p> |
| 119 - 75 | <p>In making a decision, such as a finding of no significant restriction of subsistence uses, resources and access, an agency must examine the relevant data and articulate a satisfactory explanation for its action including a "rational connection between the facts found and the choice made." Motor Vehicle Manufacturer's Ass'n v. State Farm Auto. Ins. Co., 463 U.S. 29, 43 (1983). Instead, BLM made broad generalizations to support its findings that no significant restrictions to subsistence would result from the activities proposed under any of the alternatives. For example, each of the alternatives proposed opening about 2,600 acres of BLM land to mining, oil and gas, or associated road development. See Draft RMP/EIS at 4-126, 127, 129, 131. BLM provided no detailed analysis of the effects on subsistence resources, use and access associated with these activities. Instead, it simply stated that "only a small portion of the subsistence resources and use on BLM-managed lands may be affected." See Draft RMP/EIS at 4-126, 127, 129, 131. Such paucity of information and analysis cannot support BLM's decision that there would be no significant restriction on subsistence under any of the alternatives.</p> | <p>BLM is committed to conclusions that follow in a rational fashion from the facts identified and disagrees with the view that the conclusions of the Section 810 analysis are not rationally founded. The cited portion of the Draft RMP/EIS (i.e. pages 4-126, 127, 129, and 131) refers to general potential impacts from oil and gas development activities drawn from the very different context of the North East National Petroleum Reserve Alaska, and not qualified as to the land status and likely scale of development in the Ring of Fire Planning area. When the Ring of Fire planning area context is taken into account, the conclusion properly drawn is that impacts are minimal and highly localized in scale. Additional discussion of development activities in each of the planning areas was taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis of this PRMP/FEIS.</p> |

Subsistence

| Comment # | Comment | Response |
|-----------|---|---|
| 119 - 76 | <p>Moreover, the destruction of a “small portion of subsistence resources” could be the difference between feast and famine for subsistence users that rely on that area for their subsistence activities.</p> <p>For example, Alternative B would have the greatest impact on subsistence resources. It would open almost all unselected lands to oil and gas leasing and development, open to mineral development all lands withdrawn pursuant to Section 17(d)(1) of the Alaska Native Claims Settlement Act (ANCSA), and open all BLM-managed lands to OHV use. Draft RMP/EIS at 2 3. It would open as many as 2,600 acres of BLM land to mineral, oil and gas development and road building. Draft RMP/EIS at 4-126. Although BLM found that “the effect of Alternative B to subsistence would be greater than that of any of the other alternatives,” it stated that those impacts “would remain localized and would not significantly affect subsistence species or resources on a population scale.” Draft RMP/EIS at Appendix I-8. This conclusion, without more support, defies logic.</p> <p>Additionally, BLM predicted that, under Alternative B, “the loss of access to lands presently under BLM management could reduce or block subsistence user access to harvest locations and traditional camps and sites.” Draft RMP/EIS at 4-126. This alone could prove to be a significant restriction of subsistence uses, resources and access.</p> | <p>Agree with commenter that all subsistence resources are important, but disagree with proposition that the level of disturbance reviewed in this plan could result in famine for subsistence users in region. Estimated levels of activity in Alternative B are detailed in the subject matter sections of the PRMP/FEIS, based on careful assessment of resource endowments, historic levels of activity, market pressures and logistical challenges. Details on likely levels of development and locations for mineral development are found in Appendix G, including the estimate that this development would amount to approximately 2600 acres of land, not only those managed by BLM, and only within Southcentral Alaska. The depiction of the Cook Inlet Oil and Gas Basin in Appendix G (Attachment A), shows little overlap between this basin and the BLM managed lands in Southcentral Alaska. The quoted sentence of concern on page 4-126 of the Draft RMP/EIS refers to possible impacts, but in the following paragraph the potential effect is qualified in reference to the limited development potential on BLM lands, with somewhat greater risk of impacts on lands conveyed to Alaska Native corporations. More detail has been added the Section 810 assessment of Alternative B to clarify the basis for the conclusion that the estimated activities will not significantly restrict subsistence uses.</p> |
| 119 - 77 | <p>Alternative D, BLM's preferred alternative, also proposed revoking all 17(d) (1) withdrawals. Draft RMP/EIS at 4-130. The level of development potential, and overall effects for leasable, locatable, and salable minerals would be similar to that in Alternative B. Id. Like Alternative B, some or all of these 17(d)(1) lands, which are presently under BLM management, would be off limits to subsistence users, eliminating or reducing their access to harvest locations and traditional camps and sites.⁴ To comply with its obligations under Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), BLM must provide a detailed discussion and analysis of the restrictions on subsistence that would result. It failed to do so.</p> | <p>The detailed analysis of mineral development potential, if the 17(d)(1) withdrawals are revoked, concluded that impacts would occur on approximately 2600 acres of land across the planning region, not just on BLM managed lands, most likely in the Southcentral region. Considering that this would represent less one half of one percent of the land opened by the revocation (if it all occurred on BLM-managed land), it is hardly reasonable to assert that “some or all of these 17(d)(1) lands...would be off limits to subsistence users.”</p> |

Subsistence

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 78 | BLM provided no support for its finding that Alternative D "would have a negligible effect on subsistence species, access to subsistence resources, or subsistence uses. The effects would be localized, of short duration, and would not significantly affect subsistence species or resources on a population scale." | More detailed information on development activities is found in the subject matter sections in the Proposed RMP/Final EIS, and this was the basis for the conclusions drawn in the Section 810 analysis. Appendix G provides a detailed account of oil and gas resource and development potential, supporting the estimate of 2600 acres affected. Discussion of the likely extent of timber development is found in Section 4.2.4, supporting the estimate of 20 acres disturbance per year, primarily on BLM lands in the Matanuska-Susitna Valley and the Kenai Peninsula, with little road construction activity. Additional discussion of development activities, broken out for the four planning regions, has been taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis. The underlying analysis of no significant impacts remains justified. |
| 119 - 79 | It provided no information on the Stipulations and Required Operating Procedures (ROPs) that it claimed would "ensure that significant reduction to subsistence species and resources is unlikely to occur" in finding that Alternative D would not significantly restrict subsistence uses. | Comment acknowledged and additional details from Appendix D on ROPs and stipulations have been added to the Proposed RMP/Final EIS. All permitted activities, including timber and mineral development, are subject to the required operating procedures, including 15 standards to protect soils from erosion, and 20 standards to protect fish and wildlife from disturbance and adverse impacts. Key examples include standards for stream crossings (FWH-3), sets backs from fish-bearing streams and lakes (FWH-6), and buffers from water bodies in timber sales (FWH-10). |
| 119 - 80 | To comply with its ANILCA mandates and to allow informed decision-making and public participation, BLM must provide more analysis. It must indicate where the almost 2,000 acres of mineral extraction, as well as the other activities anticipated under this alternative, would occur in relation to subsistence resources and activities and the extent to which they would conflict. | Areas of potential mineral development are identified in Chapter 4.2.4 within the discussion of Locatable Minerals. ROPs and stipulations are the minimum guidelines that will be used to ensure that resource impacts will be mitigated, on a site-specific basis, during the NEPA process associated with the Plan of Operations review and approval. Mineral activities will be required to follow BLM 3809 Regulations as well as federal and state laws and regulations. There is flexibility built into the ROPs so that site-specific analysis and subsequent remedial measures will provide mitigation for the particular proposed project. |

Subsistence

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 82 | BLM should provide more analysis to support its conclusion that the cumulative case would "have no or negligible additive impact on subsistence resources and their habitats, or on subsistence uses of the unencumbered BLM lands." See Draft RMP/EIS at I-13. The proposed Pebble Copper mining prospect, proposed State of Alaska oil and gas leases, the Kensington and Jualin mines, and heli-skiing operations on the Kenai Peninsula and near Haines may have significant impacts on subsistence species and access. Draft RMP/EIS at I-12. Thus, incremental changes may impose a significant restriction on subsistence resources and BLM's finding of no significant restriction is unsupported. | The assessment of the cumulative effects case for subsistence in the Section 810 analysis builds upon the cumulative effects analysis of key subsistence resources and habitat elements in Section 4.4. Additional details from the discussion of cumulative effects on fisheries and aquatic habitat, wildlife, and subsistence have been added to the PRMP/FEIS. These cumulative effects analyses conclude that activities under the provisions of the Ring of Fire PRMP/FEIS would make minor contribution to overall regional cumulative effects, given the limited development potential and small, dispersed scale of BLM managed lands. The limited proximity of the most significant RFFAs to BLM lands and community subsistence use areas supports the conclusion that together the BLM managed or permitted activities and the RFFAs will not significantly restrict subsistence uses on the unencumbered BLM lands. |
| 119 - 83 | As for BLM's second obligation under tier-I, which requires it to assess whether other lands are available for the purposes it seeks to achieve in each of the alternatives, BLM summarily found "that there are no other lands available for the BLM land management purposes sought to be achieved. See, e.g., Draft RMP/EIS at I-10. Such a conclusion, without illuminating how the agency reached its decision and what alternatives it considered, is inadequate and an end-run around the requirement that BLM seriously consider other lands for the purposes it seeks to achieve. See Instruction Mem. at 1-2. Without further information, and a detailed discussion of the activities planned under each alternative, it is not possible for BLM or the public to evaluate the adequacy of the foundation for this determination. BLM should provide the analysis underpinning its decision in adequate detail. | The comment misconstrues the requirement for consideration of "other lands" in the tier-I Section 810 analysis, when the proposed activity under review is a plan for all BLM-managed lands in an area. By definition the PRMP/FEIS addresses all BLM-managed lands within a planning region, and so no other lands in the planning region can be identified as alternatives for BLM activities. The four alternatives in the PRMP/FEIS represent a reasonable spectrum of planning approaches, with varying degrees of authorization and management provisions for a large set of activities. The analysis of these alternatives represents a rational process of considering alternative lands for the various development activities under review in the planning area. |

Subsistence

| Comment # | Comment | Response |
|-----------|--|--|
| 119 - 84 | <p>Finally, in discussing the third prong of the tier-I analysis, the alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes, BLM simply stated that "the only alternative that would completely eliminate the use of public lands needed for subsistence would be an alternative that prohibited any activities that conflicted with subsistence uses on the lands used for that purpose." See e.g. Draft RMP/EIS at I-9. BLM then cited its legal mandates as preventing such an action. Id. BLM should not cast the third prong as a paradox: that to eliminate threats to the use, occupancy or disposal of land needed for subsistence, the agency would have to prohibit all other uses of the land. BLM provided no foundation for its decision to ignore the other criteria: that it examine alternatives that reduce the use, occupancy or disposition of those lands. The agency's internal guidance instructs it to evaluate alternatives that "are other ways to accommodate the proposed action or other actions," Instruction Mem. at 1-4. It failed to do so.</p> | <p>Comment acknowledged and language revised to emphasize that the range of alternatives reviewed in the plan constitute an analytically sound effort to identify contrasting management approaches to development activity, with some alternatives reducing or eliminating some uses. It is not logical to propose that each of the four alternatives should be subject to additional development and review in the form of alternatives to the alternatives.</p> |
| 119 - 86 | <p>BLM found that there would be no significant restriction (FONSR) on subsistence uses and resources for each of its alternatives, including the cumulative effects of each alternative. By issuing a FONSR for all the alternatives, BLM avoids the need to conduct tier-II analyses, which would require the agency to give notice of and hold public hearings, and make specified findings about, inter alia, the propriety of the proposed action and the measures that would be taken to mitigate adverse impacts on subsistence uses and resources. Because BLM's analysis lacked detailed information on potential impacts on specific subsistence resources, uses and access, it failed to provide adequate support its conclusions. Before issuing a Final RMP/EIS, BLM must provide additional support for its FONSR.</p> | <p>The analysis of impacts to subsistence uses is based on the merits of the resources assessment, development probabilities, land status, and subsistence use patterns, not on an effort to avoid public hearings on subsistence impacts. The BLM routinely conducts such hearings in other planning and environmental review cases, where the nature of the proposed activities and impacts warrant a finding of "may significantly restrict subsistence uses." More detailed information on development activities is found in the subject matter sections in the Proposed RMP/Final EIS, and this was the basis for the conclusions drawn in the Section 810 analysis. Appendix G provides a detailed account of oil and gas resource and development potential, supporting the estimate of 2600 acres affected. Discussion of the likely extent of timber development is found in Section 4.2.4, supporting the estimate of 20 acres disturbance per year, primarily on BLM lands in the Matanuska-Susitna Valley and the Kenai Peninsula, with little road construction activity. Additional discussion of development activities, broken out for the four planning regions, has been taken from the subject matter sections in Chapter 4 and included in the Section 810 analysis. The underlying analysis of no significant impacts remains justified.</p> |

End of section on Subsistence

Threatened and Endangered Species

| Comment # | Comment | Response |
|-----------|--|--|
| 13 - 7 | And also we ask that anything that is potential Stellar's Eider habitat on the Alaska Peninsula is managed as such. Seems that on the maps the Stellar Eider identified habitat seems to stop at the BLM boundaries of the land, so we are not sure if that means you guys don't know if they are there yet or if they haven't been documented yet, but I'd like to go ahead and assume that they are present until proven absent and managed as such. | The Steller's eider important habitat in the Ring of Fire planning area consists only of the marine waters offshore of the Alaska Peninsula in three locations, as established by the USFWS. These sea ducks do not come ashore in the winter so there are no BLM lands where they are actually present. BLM will assess the potential for land use activities on adjacent BLM lands that may affect these marine waters on a case-by-case basis, using the NEPA process. |
| 22 - 11 | 2. Trumpeter swans listed as a 'sensitive species' in the plan indeed depend upon the Knik valley. | Trumpeter swans are listed as a BLM sensitive bird species. They are also resident species of the Southcentral region of the Ring of Fire planning area (Chapter 3). Section 4.3.1.5.1 of the PRMP/FEIS discusses specific management objectives for BLM sensitive species that are common to all alternatives. Future management of this species in the Knik River SRMA will be addressed in implementation level planning. |
| 119 - 59 | For species listed as endangered or threatened under the ESA, BLM must formally consult with the Fish and Wildlife Service when taking any action that may affect the critical habitat of those species. 16 U.S.C. § 1536(a)(2) (2004). The ESA requires all Federal agencies to seek to conserve endangered and threatened species. It also requires all Federal agencies to avoid jeopardizing the continued existence of any species that is listed or proposed for listing as threatened or endangered, and to avoid destroying or adversely modifying a listed species designated or proposed critical habitat. | BLM agrees and does consult with USFWS regarding matters pertaining to threatened or endangered species. Under all management alternatives of this Proposed RMP/Final EIS, BLM will ensure that actions authorized by BLM are consistent with the conservation needs of Alaska BLM special status species and do not contribute to the need to list any special status species under the provisions of the Endangered Species Act (ESA) of 1973, as amended (see 2.4.5.2 of the Proposed RMP/Final EIS). The Biological Assessment is being prepared as part of this planning process. |

Threatened and Endangered Species

| Comment # | Comment | Response |
|-----------|---|---|
| 119 - 60 | <p>BLM Manual 6840 contains BLM's policy for species listed as threatened or endangered under the ESA as well for species that are candidates for listing. With respect to candidate species, BLM employees must "implement management plans that conserve candidate species and their habitats and . . . ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for species to become listed." See BLM Manual 6840.06C, Special Status Species Management.</p> <p>Where BLM authorized actions have a "significant effect" on the candidate species status, BLM shall manage the habitat to conserve the species by "implementing range-wide or site-specific management plans, conservation strategies, and assessments for candidate species." The agency must ensure that "BLM activities affecting the habitat of candidate species are carried out in a manner that is consistent with the objectives for managing those species," and monitor "populations and habitats of candidate species to determine whether management objectives are being met." BLM Manual 6840.06(C)(2).</p> <p>BLM Manual 6840.06B, Special Status Species Management, directs agency personnel to consider the needs of candidate species in land use plans. It also directs BLM to develop range-wide or site-specific conservation strategies for each candidate species. With respect to species proposed for listing as threatened or endangered, BLM must manage the species, as well as designated and proposed critical habitat, with the same level of protection provided for listed species except that formal consultations are not required.</p> | <p>BLM agrees. Under all management alternatives of this Proposed RMP/Final EIS, BLM will ensure that actions authorized by BLM are consistent with the conservation needs of Alaska BLM special status species and do not contribute to the need to list any special status species under the provisions of the Endangered Species Act (ESA) of 1973, as amended (see 2.4.5.2 of the Proposed RMP/Final EIS). The Biological Assessment is being prepared as part of this planning process.</p> |
| 119 - 61 | <p>The Draft RMP/EIS contains a map that shows that Izembek Lagoon's federally recognized Critical Habitat for Steller's Eider and Steller Sea Lion is located directly adjacent to unencumbered BLM lands near Cold Bay. See Draft RMP/EIS Figure 2.3-9. However, BLM failed to provide maps that depict the BLM-managed lands contiguous with Nelson Lagoon and near the Seal Islands. The draft plan also lacks discussion of BLM's management plans for these threatened species.</p> | <p>The Biological Assessment is being prepared as part of this planning process, and will contain maps depicting Steller's Eider and Steller Sea Lion habitat. Future projects are subject to the NEPA process, which will evaluate the potential effects of these proposals and actions on threatened species, and develop mitigation measures specific to the proposal and location to reduce or eliminate actions that may impact individuals or adversely modify or destroy important habitat. The Proposed RMP/Final EIS includes protective measures (ROPs, stipulations, and lease terms) to reduce or eliminate impacts to fish, wildlife, and vegetation. These protective measures apply to Threatened species and combined with BLM's requirements under Section 7 of the ESA provide adequate management direction to prevent BLM actions adversely affecting threatened species.</p> |

Threatened and Endangered Species

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 119 - 62 | The Draft RMP/EIS should have described the species inventories that have been conducted to document the presence or absence of listed species or those that are proposed for listing. It should have indicated whether BLM, the U.S. Fish and Wildlife Service or other federal agencies have even conducted such inventories on BLM lands and nearby Native selected lands. The BLM should have described in the Draft RMP/EIS the size and location of Critical Habitat for the Steller's Eider and Steller Sea Lion, whether documented or undocumented, on BLM-managed lands in the planning area. At a minimum, BLM must include a discussion of the results of these surveys in the Final RMP/EIS. | The Proposed RMP/Final EIS will include descriptions of inventories conducted by USFWS to determine the distribution and abundance of Steller's Eiders and Steller Sea Lions in the planning area |
| 119 - 63 | If special status species inventories have not yet been completed, as required by the ESA, BLM should specify how and when it intends to do so. Special status species inventories should be high priority projects for the upcoming field seasons, and BLM should ensure they are sufficiently funded. BLM must clearly identify the presence and needs of Steller's Eider and Steller Sea Lion populations and habitat on BLM managed lands. BLM must institute protective management controls before it permits any new development activities on the Alaska Peninsula. | Please see response to comment 13-7 under Threatened and Endangered Species. |
| 119 - 64 | As documented by the Draft RMP/EIS, most of the Pacific population of Steller's Eider migrates to wintering grounds in the Ring of Fire planning area. If BLM cannot dedicate sufficient resources to monitor and manage the Eider's potentially critical habitat as such, we believe that BLM should convey its unencumbered on the Alaska Peninsula to either the U.S. Fish and Wildlife Service or the National Park Service. | All known use by this species within the planning area occurs on land or water not managed by BLM. No designated Critical Habitat overlays BLM-managed lands. All designated Critical Habitat in the Ring of Fire planning area is marine. Transfer of land ownership on the Aleutian Chain is an ongoing activity. There are no lands on the Aleutian Chain that are unencumbered- all lands fall within the various Wildlife Refuges, or selected by Native corporations or the State of Alaska (or both). BLM will continue to satisfy these entitlements as part of the Alaska Land transfer Program. Conveyance of BLM unencumbered lands to the USFWS or the NPS would not automatically result in improved monitoring or management of the land relative to the Steller's Eider. Currently, USFWS' migratory bird management division conducts inventories of this species annually and provides the collected data to BLM for use in management decisions. |

Threatened and Endangered Species

| Comment # | Comment | Response |
|-----------|---|---|
| 119 - 65 | <p>In its Alaska Peninsula and Bristol Bay Basin Ecoregional Assessment, The Nature Conservancy identified bird habitat in the Port Heiden area as critical to many species, including the Steller's Eider and Beringian marbled godwit. Barbara and Reindeer creeks and neighboring shorelines are a "highly productive food base" that supports these waterfowl and shorebirds. Audubon Alaska and The Nature Conservancy agree that the Port Heiden region is a "core area" of biological significance.² The State of Alaska has designated the Port Heiden region as a State Critical Habitat Area, recognizing the importance of protecting these waterfowl and shorebird populations.³ The Nature Conservancy also identified the Port Moller area, located to the north of the BLM administered lands, as a "core area" of biological significance. Thus, BLM must closely monitor for trends and fluctuations these sensitive bird populations on BLM shores.</p> | <p>Within its management plans, BLM has objectives to manage wildlife habitat to meet the goals of BLM's National Fish and Wildlife 2000 initiatives, ADF&G management plans (Port Moller is also a Critical Habitat Area), federal subsistence mandates, and BLM Alaska Statewide Land Health Standards. Among these objectives are to inventory and monitor BLM-managed lands to determine the status and distribution of sensitive species and their habitats. Please see Section 4.3.1.5.1 of the Proposed RMP/Final EIS for more detail. BLM manages about three and seven miles of Barbara and Reindeer Creeks, respectively, in a manner consistent with fish and wildlife plans. However, BLM is not required to conduct inventories for Special Status Species (i.e., threatened or endangered). These inventories, including habitats within the planning area for Steller's Eiders, are conducted annually by USFWS migratory bird management.</p> |

1 of section on Threatened and Endangered Species

Vegetation

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|-------------------------------------|--|--|
| 32 - 5 | While some say that this area is nothing but sand and rock, nothing could be farther from the truth, as most of the area is vegetated and wet lands. Please review the attached pictures and the captions. | Thank you, comment acknowledged. |
| 119 - 128 | BLM should develop guidelines for rehabilitation and re-vegetation in open areas to minimize the introduction of noxious weeds and non-native plants. | It is a BLM objective to promote healthy, sustainable, fully functioning ecosystems. Included in this will be management to prevent the spread of invasive plant species, including noxious weeds. Desired ecological conditions for vegetation are described in the BLM Alaska Statewide Land Health Standards (BLM 2004u). See Section 2.5.13 of the Proposed RMP/Final EIS. |
| <i>End of section on Vegetation</i> | | |

Visual Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 13 - 4 | And I believe that the VRM Class 1 should be applied to Neacola Mountains in certain areas. Potentially VRM Class 2 could be appropriate, but overall, especially in the Blockade Glacier area, there doesn't really seem to be any reason why VRM Class 1 wouldn't be upheld easily enough. I don't know of any proposed development out there, really any interest in it that would drop it down from its current classification, which is incredibly primitive and undeveloped. | The visual resources of the Neacola Mountains were inventoried and classified in accordance with procedures outlined in the BLM Handbook 8410-1 and summarized on page 3-104 of the Draft RMP/EIS. Under the Proposed Action (D), the Neacola Mountains ACEC will be managed as a VRM Class II. This area was assigned this class based on the value of the visual quality and anticipated future land uses. Visual resource classifications were assigned based on our analysis of the areas and the application of BLM's VRM criteria. |
| 54 - 5 | Furthermore we ask that VRM Class II be applied to the entire Neacola ACEC areas. | Please see response to comment 53-4 under Special Management Areas. |
| 78 - 5 | I encourage the BLM to recognize and protect the scenic beauty of these two areas from any industrial exploitation in order to allow our children to enjoy these lands in their natural wild state, as I have. | The visual resources of the Neacola Mts. were inventoried and classified in accordance with procedures outlined in the BLM Handbook 8410-1 and summarized on page 3-104 of the Draft RMP/EIS. BLM is confident that under the Preferred Alternative (D), VRM Class II would be an appropriate level of management for the Neacola Mountains ACEC. Development, where allowed, would be subject to the ROPs and STIPs in Appendix D which are the minimum guidelines that will be used to ensure that resource impacts will be mitigated, on a site-specific basis, during the NEPA process associated with the Plan of Operations review and approval. Additionally, commercial activities would be subject to permitting and consultation requirements under the Clean Water Act, Clean Air Act, Migratory Bird Treaty Act, and other local, state, and federal requirements. |
| 86 - 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | The Proposed Action (D) would designate the Neacola Mountains as an ACEC with a VRM Class of II. |
| 93 - 3 | Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |

Visual Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 94 - 4 | The Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 99 - 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 100 - 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 101 - 4 | I also believe that Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 104 - 4 | Additionally, Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 106 - 4 | Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |

Visual Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 107 - 4 | Visual Resource Management Class II should be applied to the Neacola Mountains ACEC, as this will provide sufficient management tools for preserving and enhancing the scenic beauty of the area. | Please see response to comment 53-4 under Special Management Areas. |
| 109 - 3 | The Neacola Mountains ACEC should fall under Visual Resource Management Class II. | Please see response to comment 53-4 under Special Management Areas. |
| 110 - 5 | Furthermore we ask that VRM Class II be applied to the entire Neacola ACEC areas. | Please see response to comment 53-4 under Special Management Areas. |
| 119 - 66 | We support the proposal to assign Visual Resource Management (VRM) Class II to the Neacola Mountains ACEC. VRM Class II will provide appropriate management tools and guidance for mitigating impacts from recreational OHV use and development activities. We recommend that VRM II standards be enforced in land use decisions to reflect BLM's commitment to protect and enhance the area's exceptionally high scenic values. | See response to comment 53-4 under Special Management Areas. |
| 119 - 67 | <p>We recommend that BLM assign VRM Class II to the Haines SRMA designation in the Final RMP/EIS to retain and preserve the existing undeveloped characteristics of the visual resources.</p> <p>By contrast, a VRM Class IV designation, according to BLM VRM guidance materials, may "provide for management activities that require major modification to the existing character of the landscape." This would only require BLM to establish a few guidelines to prevent permitted surface-disturbing activities from causing high levels of change to visual resources in areas where there are only minor, if any, existing scenic impacts.</p> <p>Such lenient allocations for the management of surface disturbing activities, such as mineral development and OHV use, as proposed in the Preferred Alternative would be inappropriate.</p> | <p>The visual resources of the planning area were inventoried and classified in accordance with procedures outlined in the BLM Handbook 8410-1 and summarized on page 3-104 of the Draft RMP/EIS. BLM is confident that under the Proposed Action (D), the VRM classifications of II (Neacola Mountains ACEC, Lake Carlanna, and Halibut Cove Forest Study Area) and IV (all other lands) would be an appropriate level of management for the planning area.</p> <p>All surface-disturbing activities are required to go through a NEPA process, which provides additional opportunity to mitigate potential impacts and are subject to the application of the ROPs and stipulations.</p> <p>Visual resource classifications were assigned based on our analysis of the areas and the application of BLM's criteria.</p> |

Visual Resources

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|---|--|---|
| 119 - 68 | <p>Most of the planning area is currently undisturbed and could be classified through Scenic Quality Ratings as meeting VRM Class I and II criteria, especially when compared on a national scale to public lands in the contiguous United States. BLM guidance materials explain that VRM Class V is “applied to areas where the natural character of the landscape has been disturbed to a point where rehabilitation is necessary to bring it up to one of the other four classifications.” Allowing BLM public lands to be degraded to VRM Class IV standards means that they will be only one step away from requiring major “rehabilitation.” Once natural scenery is damaged, it can never be fully restored.</p> <p>We recommend that BLM uphold strong VRM goals, and apply the VRM Class I, II and III standards. These principles will minimize the occurrence of devastation of BLM lands, and minimize the impact of activities that would otherwise diminish scenic values to a point where major rehabilitation would be required. We believe that VRM Class IV is a far too lenient management standard in that it fails to adequately protect visual value, the natural character and the scenic beauty of the vast majority of lands in the planning area.</p> | Please see response to comment 119-67 under Visual Resources. |
| 119 - 69 | <p>We understand that BLM will continue to make VRM decisions on a case-by-case basis for proposed activities. Above all, we encourage BLM to require permitted operators to minimize the impacts of surface-disturbing activities on the scenic resources of all public lands, especially within the Neacola Mountains ACEC, the Haines area, and lands adjacent to the highways and commercial flight paths. Any permitted activities must be designed to minimize damage to the landscape so that they do not attract attention or visually clash with the adjacent scenery.</p> | Please see response to comment 119-67 under Visual Resources. |
| <i>End of section on Visual Resources</i> | | |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 1 - 2 | And so I'd like to see the – if they're going to be – if mountain goats are going to be considered as a wildlife and whether we should have helicopters, I think there should be some serious studies; not some just marginal opinions. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 1 - 5 | We need some serious "has helicopters affected goats in other areas," rather than just a bunch of comments and taking them when they have no value if they don't have any proof. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 4 - 3 | And swans are supposed to be protected, and when they're setting off fireworks at Swan Lake, 4th of July two years ago, and they drove the swans off the nest and the babies could not fly or get out yet. | Thank you, comment acknowledged. |
| 28 - 3 | Nor does it address the need for other wildlife to den, forage, hunt and migrate, such as moose, fox, coyote, and wolf during the alternative months without disturbance from extraction/development activity. | <p>Section 4.3.1.5 of the PRMP/FEIS mentions possible adverse effects to wildlife species and important habitat, such as wildlife displacement as the result of direct habitat loss. Also, the PRMP/FDEIS classifies lands for various purposes, but does not authorize any activities. Future proposals will be subject to the NEPA process and the application of the ROPs and stipulations.</p> <p>Lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable federal laws and regulations, and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on federal leases. BLM permitting approval does not alleviate operators from the requirements of obtaining necessary permits from other entities such as the State, other federal agencies or boroughs. It is the ultimate responsibility of lessees and operators to comply with regulations outside the jurisdiction of BLM.</p> <p>Please also see response to comment 28-4 Leasable Minerals.</p> |

Wildlife

| Comment # | Comment | Response |
|-----------|---|--|
| 29 - 6 | In section 1.3.1 the draft states "...degradation of natural resources has occurred, including impacts to habitat for runs of red and silver salmon and for waterfowl." We're concerned with the implication that the fish and wildlife in this area are negatively impacted in a significant way. According to the State Department of Fish and Game who actively manages fish and game including salmon, waterfowl and large game, they have not determined a significant impact and have written documentation to that effect. In fact, salmon fishing and waterfowl hunting is widely considered to be healthy in the area. We're requesting that the draft include some language that require objective and professional analysis such as by the Alaska Department of Fish and Game for determining any detrimental impact to those natural resources. Also that any limitation imposed to protect natural resources be only as a result of significant declining population numbers as documented by state or federally funded biologists assigned to the area. | The cited comment is a summary of the issue as identified by the public and internal scoping process. It is not an evaluation of the scope, scale, or severity of the perceived impact. The PRMP/FEIS does include language explaining the incorporation of fish and wildlife data from the Alaska Department of Fish & Game. In 1983, a Master Memorandum of Understanding (MOU) BLM and ADF&G agreed to recognize their respective roles in managing fish and wildlife resources and their habitat. According to the MOU, BLM agreed to recognize ADF&G as the primary agency responsible for management of use and conservation of fish and wildlife resources on federal lands (see 1.5.2 of the PRMP/FEIS). As a multiple use and management agency, BLM cannot state that the only limitations imposed to protect natural resources will be the result of documented population declines, as a preemptive management might be appropriate to a particular situation. |
| 29 - 9 | Regarding the Neacola Haines and Skagway areas and potential limitations to helicopter and other back country means of access, we are fundamentally opposed to restrictions that may not be based totally on fact. We understand limitations where fish and game species in a given area are proven to be negatively impacted in a measurable and significant way. However, when allegations of long-term impact to species such as goats have not been proven, we oppose restrictions to alleviate or study alleged impact. We do feel that allegations must be supported by objective analysis from state or federally funded wildlife biologists before imposing any restrictions. | BLM agrees that any policy changes should be supported by objective analysis. BLM has compiled mountain goat data gathered during this project. BLM will consider the data, to the extent that the data are pertinent and useful, in the development of the implementation plan for the Haines area. More studies or further analysis may be forthcoming. Please also see response to comment 34-11 under DOI/BLM Compliance. |
| 34 - 13 | For the above reasons, we request BLM's ten years of goat monitoring data be analyzed and that analysis be included in a SDEIS. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 34 - 34 | 3) Long term wildlife monitoring is essential and also needs to include monitoring the permitted activity for compliance with restrictions. Also essential is providing control areas against which impacts can be measured. Special recreation permit fees should be sufficient to fund compliance monitoring and data collection. | Currently BLM uses revenue from Special Recreation Permit fees to finance compliance and monitoring activities associated with those permits that generate returns. Permit fees are often not sufficient to fully fund these compliance and monitoring activities. |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 40 - 2 | Haines has outstanding mountain goat resources that need an appropriate management designation for protection. | BLM agrees with the importance of the mountain goat resources in this area. See response to comment 34-11 under DOI/BLM Compliance. |
| 40 - 5 | 3) BLM should analyze their data from 10 years of goat monitoring before issuing any heli-recreation permits and before designating a large area of goat habitat for heli-recreation. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 43 - 6 | Mountain goats are ruminants, which means that they eat a lot of food rather quickly and then do the real chewing later on, while they're resting. Bacteria in the rumen break down the chewed food, convert it to sugars and proteins and so on that the goat can digest, and produce a lot of heat in the process. Ruminants are not well designed for running and mountain goats in particular aren't. They eat very large quantities of very rough food: relative to their bodyweight they eat three or four times as much as sheep or cows do. That much fermenting forage plus a kid or two and an incredibly heavy warm coat means that they're about as likely to run as a woman in late pregnancy carrying triplets. As a comparison, horses are not ruminants, eat relatively much smaller quantities of much higher-quality food, and do run when frightened. | Thank you, comment acknowledged. |
| 43 - 7 | It's helpful to know this basic biology because it explains why heliskiing think that mountain goats aren't bothered by helicopters. I've heard heliskiing say that they had flown over to about 200' of mountain goats, and "the goats weren't bothered at all". But goats will always stand and face a threat; it's basic goat behavior. It certainly doesn't suggest that the goat doesn't mind or isn't affected. | Thank you, comment acknowledged. |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 43 - 8 | <p>Zoos everywhere have come to understand that pregnant animals have to be shielded from stress. Stresses can vary I as can reactions, but diet, lack of privacy, and noise are some of the best documented problems. Effects of the stress can include infertility, miscarriage, stillbirth, suppressed lactation, abandonment and outright killing of the baby. In the wild all you would be likely to see would be lower overall reproduction. (Relative to which, I've heard that would-be goat hunters are already complaining that there are "no goats" on Flower Mountain up in the Haines pass- this is frequently used by heliskiing). There's a chemical pathway by which the reproductive loss occurs: All the different aspects of the reproductive system have their own hormones (estrogen, progesterone, and prolactin) but there's one overriding hormone, cortisone, which runs the whole show. In a fear type situation, cortisone is released, floods the brain and suppresses the other hormones. Pregnancy can't take much of this; it needs its hormones to carry on. One severe stress might be enough to terminate it, or several repeated, or perhaps a combination.</p> <p>Effects of stress are the same for all mammals.</p> | Thank you, comment acknowledged. |
| 43 - 10 | Fish and Game asked that the mountain goat populations in the Chilkoot/Ferrebee ranges be protected from heliskiing in order to use them as a control group to compare with other local populations that do have heliskiing. | Thank you, comment acknowledged. |
| 43 - 16 | The entire area is essential habitat for brown bears, with sows and cubs using the lower river more in the summer, and others using the lake and spawning streams that run into it. | Thank you, comment acknowledged. |
| 45 - 6 | Scientific studies and personal experiences show that snowmachines, helicopters and personal watercraft have harassed, stressed, displaced, and otherwise negatively affected wildlife. Mountain goats are a particular species that are known to be sensitive to helicopters. Evidence has been gathered that shows that the extensive helicopter activity in Skagway is not adequately mitigated, monitored or controlled to the detriment of wildlife. | Please see response to comment 22-12 under Enforcement and Monitoring. |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 45 - 7 | Across the canal in Haines is the heaviest concentration of mountain goats on BLM managed lands in North America and fewer helicopter activities. This is a not-to-be-missed opportunity to study and protect the mountain goat population on BLM lands with a special use designation that would prohibit heli-playing and other invasive activities. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 45 - 8 | As recently as 2002, BLM and USFS, in their joint request to the National Fish and Wildlife Foundation for a grant to study helicopter effects on wildlife, indicated that they did not have comprehensive, scientific guidelines to successfully protect wildlife populations including goats, from helicopter impacts. | Thank you, comment acknowledged. |
| 68 - 2 | We also want BLM to protect mountain goats, other wildlife and wilderness values in Haines. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 71 - 2 | I feel the RMP accurately assesses Haines' outstanding mountain goat resources. These resources need to be protected by an appropriate management designation. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 71 - 4 | <p>The RMP puts the existing Goat Monitoring and Control Area into a SRMA with a mandate to meet public demand for helicopter recreation. This designation conflicts with a control area intended to protect goats from helicopter recreation and should be changed to a ACEC/RNA designation.</p> <p>The BLM should analyze the ten years of goat monitoring data they have before issuing any new helicopter landing permits and before designating a large area in goat habitat for helicopter-based recreation, which the SRMA would allow to happen.</p> | Please see responses to comments 34-11 and 34-27 under DOI/BLM Compliance. |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 84 - 3 | The goat research by BLM Biologist, Jeff Denton now includes 10 years of data in the Haines area. The BLM would be remiss in considering any new helicopter use permits without first analyzing this important data-base, and the outcome of that analysis certainly will bring new information to bare on how the BLM should best manage its lands for future generations. | Please see response to comment 34-11 under DOI/BLM Compliance. |
| 87 - 6 | Waterfowl are being disturbed and destroyed (by our own and our neighbors' observation) continuously because of ORV, airboat, shooting and fireworks activity. Poaching of wildlife is excessive. Raptors, ravens are targets for shooters. | Please see responses to comments 4-2 under Off-Highway Vehicles and 22-12 under Enforcement and Monitoring. |
| 112 - 6 | In section 1.3.1 the draft states "...degradation of natural resources has occurred, including impacts to habitat for runs of red and silver salmon and for waterfowl." We're concerned with the implication that the fish and wildlife in this area are negatively impacted in a significant way. According to the State Department of Fish and Game who actively manages fish and game including salmon, waterfowl and large game, they have not determined a significant impact and have written documentation to that effect. In fact, salmon fishing and waterfowl hunting is widely considered to be healthy in the area. We're requesting that the draft include some language that require objective and professional analysis such as by the Alaska Department of Fish and Game for determining any detrimental impact to those natural resources. Also that any limitation imposed to protect natural resources be only as a result of significant declining population numbers as documented by state or federally funded biologists assigned to the area. | The cited comment is a summary of the issue as identified by the public and internal scoping process. It is not an evaluation of the scope, scale, or severity of the perceived impact. The Proposed RMP/Final EIS does include language explaining the incorporation of fish and wildlife data from the Alaska Department of Fish & Game. In 1983, a Master Memorandum of Understanding (MOU) BLM and ADF&G agreed to recognize their respective roles in managing fish and wildlife resources and their habitat. According to the MOU, BLM agreed to recognize ADF&G as the primary agency responsible for management of use and conservation of fish and wildlife resources on federal lands (see 1.5.2 of the Proposed RMP/Final EIS). As a multiple use and management agency, BLM cannot state that the only limitations imposed to protect natural resources will be the result of documented population declines, as a preemptive management might be appropriate to a particular situation. |
| 112 - 8 | Regarding the Neacola, Haines and Skagway areas and potential limitations to helicopter and other backcountry means of access, we are fundamentally opposed to restrictions that may not be based totally on fact. We understand limitations where fish and game species in a given area are proven to be negatively impacted in a measurable and significant way. However, when allegations of long-term impact to species such as goats have not been proven, we oppose restrictions to alleviate or study alleged impact. We do feel that allegations must be supported by objective analysis from state or federally funded wildlife biologists before imposing any restrictions. | Please see response to comment 29-9 under Wildlife. |

Wildlife

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 56 | <p>The major Haines Block planning issue is the impact of helicopter-supported recreation on goats and other wildlife, according to the Draft RMP/EIS. Thus, it is essential that BLM analyze the ten years of goat monitoring data gathered from the Haines Block prior to making land use planning decisions that may negatively affect an important wildlife resource. Wildlife specialists recognize that increasing levels of helicopter-supported recreation in goat habitat "can result in a variety of negative effects, including habitat abandonment significant enough to affect population status and herd viability, dramatic changes in seasonal habitat use, increased vulnerability to predation, alarm response, decreased bouts of foraging and resting, increased animal movement and energy expenditure, and reduced productivity." See 2004 Northern Wild Sheep and Goat Council Position Statement. This statement from a professional organization of wildlife biologists, researchers and veterinarians is based on "the best available knowledge. See <i>id.</i> It differs dramatically from the conclusion in the Draft RMP/EIS that managing the Haines Block for helicopter-supported recreation in a SRMA would have "continued minimal adverse effects from recreation activities." See Draft RMP/EIS at 4-148.</p> | <p>Please see responses to comments 34-10 and 34-27 under DOI/BLM Compliance.</p> |
| 119 - 57 | <p>"A successful land use planning effort always employs rigorous standards for maintaining, managing, and applying data and derived information." LUP Handbook Appendix G at 1. "Standardized, accurate, and reliable data and information are critical to the development of plan assessments, alternatives, impact analysis, and planning decisions." <i>Id.</i> We believe that BLM should analyze its ten years of goat monitoring data and include it in a supplemental Draft RMP/EIS as the basis for a range of alternatives that address Haines Block planning issues. This data would not only supply information about the current condition of goat populations, it could be used to predict changes in goat and goat predator resources should the current management continue, as required by the LUP Handbook. See LUP Handbook Appendix F at 8.</p> | <p>BLM agrees with the stated comments. The mountain goat inventory data is being analyzed along with other available information and will be utilized in the preparation of the Haines Block SRMA implementation-level plan. When compiled and analyzed, the assessment will be made available as a published report.</p> |

End of section on Wildlife

Wilderness

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 142 | <p>In none of the alternatives did BLM specifically identify areas within the Ring of Fire planning area for consideration as Wilderness or Wilderness Study Areas (WSA). This is in contravention of BLM's organic statute, the Federal Lands Management Act (FLPMA). Pursuant to FLPMA, BLM must "prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern" 43 USC 1711(a)).</p> <p>Once completed, these inventories become a key criterion in the development of RMPs. 43 USC 1712 (c)(4). As stated in the Alaska Coalition's scoping comments of August 2004, BLM should consider the future designation of wilderness in this planning process and is required to complete resource inventories and land use plans under the authority. See FLPMA §§201-202. FLPMA defines wilderness as a multiple use. 43 U.S.C. §§ 1701(a)(8), 1702(c)).</p> <p>NEPA requires BLM to inventory all resource values, including the impacts to those values in land use plans, and the creation of wilderness is a reasonable alternative. The identification of lands potentially suitable for WSA designation is further clarified in BLM's Wilderness Inventory and Study Procedures Handbook, as follows: Wilderness Inventory. BLM will prepare and maintain on a continuing basis an inventory of certain public lands to determine the presence or absence of wilderness characteristics.</p> <p>Identifying Inventory Areas. BLM will identify those public lands to be inventoried and notify the public of its intent to initiate an inventory to determine the presence or absence of wilderness characteristics.</p> <p>Identifying WSAs. BLM will use the land use planning process to determine which inventory areas are to be managed as WSAs.</p> <p>The Handbook also contains criteria for areas to be considered for WSA designation.</p> | <p>BLM has not analyzed wilderness designations in the PRMP/FEIS for the reasons stated in Sections 1.1 and 1.3.2.</p> |

Wilderness

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 119 - 143 | <p>We understand that BLM conducted an inventory process for the Ring of Fire planning area and that it presently may be incomplete. However, the Recreation Opportunity Spectrum (ROS), while an important aspect of the land use planning process, does not take the place of a Wilderness Inventory. The ROS inventory should be completed and should include a thorough wilderness review and inventory of the Ring of Fire planning area for submission to Congress. We strongly urge BLM to recognize wilderness as a resource category.</p> <p>ANILCA § 1320 also provides guidance for BLM's management of wilderness as a resource. It is imperative at this point in the planning process for BLM to ascertain the resource values on the public lands along the southern coast of Alaska, and one of those resources must include wilderness quality. We support the use of the ROS and designation of qualified areas as "primitive." However, this should substitute for a wilderness inventory, recommendation, and as appropriate, designation.</p> | <p>We understand your comment to mean that this should NOT substitute for a wilderness designation. BLM has not analyzed wilderness designations in the PRMP/FEIS for the reasons stated in Sections 1.1 and 1.3.2.</p> |
| 119 - 145 | <p>Should BLM continues the public process without including a wilderness inventory and recommendations, it would be in violation of law. For the reasons discussed above, NEPA and FLPMA require BLM to consider potential wilderness as a reasonable alternative for any resource management plan in Alaska. For this reason, the Draft RMP/EIS must include a reasonable range of alternatives that include recommendations for new wilderness designations.</p> | <p>BLM disagrees. NEPA says nothing about wilderness inventory or consideration in Alaska. FLPMA, Section 603 (43 U.S.C. 1782) directs the Secretary to review roadless areas for wilderness characteristics. However, 43 USC 1784 specifically exempts Alaska from this consideration. However, it does state that "the Secretary may identify areas in Alaska which he determines are suitable as wilderness and may, from time to time, make recommendations to the Congress for inclusion of any such areas in the National Wilderness Preservation System..." This is a discretionary action on the part of the Secretary. By Memorandum April 11, 2003, the Secretary directed BLM not to consider wilderness in its RMPs absent the broad support of the elected officials representing Alaska.</p> |

End of section on Wilderness

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 13 - 6 | The Iniskin River is another that was in the planning area, has absolutely remarkable brown bear habitat. Anytime flying over this river it is incredible. These resources do not exist anywhere else within the planning area on BLM lands. So we ask that the Iniskin River bear habitat is protected as long as BLM is the interim manager of that area. | BLM will retain a very small part, if any, of the Iniskin River in the long-term. Future actions are subject to the application of the ROPs and stipulations as appropriate, and will go through the NEPA process which may develop mitigation measures related to the potential impacts of the activity being considered. |
| 16 - 9 | Tsirku River and Chilkoot River need to be evaluated for wild status. Their value as anadromous streams could benefit from protection under "wild" status. | Thank you, comment acknowledged. |
| 16 - 10 | Chilkat River could receive different levels of protection; Chilkat River above Wells Bridge would qualify as a wild river. Below Wells Bridge it would qualify for differing degrees of protection. BLM should evaluate how management of the Chilkat River under Wild & Scenic protection would interface with management of the river as Chilkat Bald Eagle Preserve. The most protective status should be adopted. | Thank you, comment acknowledged. A Recordable Disclaimer of Interest application for the Chilkat River was filed on May 13, 2004 and subsequently amended on June 8, 2005. Even though the application is currently under review, it is predictable that eventually the title to this water body will no longer vest with BLM. |
| 88 - 5 | As well, I fully support the Wild and Scenic River designations of the following rivers; Chilkoot River, Ferebee River, Takhin River, Tsirku River and Chilkat River. | Thank you, comment acknowledged. |
| 89 - 7 | In addition I fully support the Wild and Scenic River designation of the Chilkoot River (both upper and lower), Ferebee River, Takhin River, Tsirku River and Chilkat River. | Thank you, comment acknowledged. |
| 90 - 4 | Additionally, I fully support the Wild and Scenic River designations of the following rivers; Chilkoot River, Ferebee River, Takhin River, Tsirku River and Chilkat River. | Thank you, comment acknowledged. The Chilkoot, Tsirku, and Chilkat Rivers were determined eligible in the Draft RMP/EIS, but not suitable for WSR designation under Alternative C in the PRMP/FEIS. Please see section 3.4.1.3 in the PRMP/FEIS for a discussion of the WSR suitability determination. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|--|
| 110 - 3 | We are concerned at the lack of designated Wild and Scenic Rivers and the lack of protection for the stairstep area above Lake George. | Thank you, comment acknowledged. |
| 113 - 3 | We appreciate the effort BLM has undertaken around the country to inventory and protect the nation's last remaining wild and scenic rivers. Unfortunately, the DRMP/EIS in its present form inadequately addresses potential wild and scenic rivers and fails to fulfill the BLM's obligations under NEPA, the Wild and Scenic Rivers Act and the BLM's own management guidelines. | The basis for BLM's determination for WSR eligibility and suitability was adequately disclosed in the Draft RMP/EIS. Clarifications have been made in the PRMP/FEIS in Section 3.4.1.3 to assist with the public review of this process. |
| 113 - 5 | The public deserves to have access to the full wild and scenic eligibility analysis and an opportunity to review and comment on this information before a Final RMP/EIS is issued. | See response to comment 113-3 under Wild and Scenic Rivers. |
| 113 - 6 | Inadequate documentation and discussion of eligible Wild and Scenic River Overall, American Rivers is disappointed by the slim analysis of eligible wild and scenic rivers and the lack of enumerated protections for identified Outstandingly Remarkable Values in the Ring of Fire DRMP/EIS. | Please see response to comment 113-3 under Wild and Scenic Rivers. |

Wild and Scenic Rivers

| Comment # | Comment | Response |
|-----------|--|---|
| 113 - 7 | <p>To be eligible for inclusion in the National Wild and Scenic River System, a river or segment thereof must be "free-flowing" and it or its related land area must possess at least one "Outstandingly Remarkable Value" (ORV). 16 U.S.C. § 1273 (b). Those are the sole criteria listed by Congress. Under these fairly objective evaluation criteria, a river or segment of river either is or is not eligible and the determination of eligibility should remain constant across all alternatives. Yet, in the DRMP, only a cursory mention is made of 14 eligible river segments that would be recommended for Wild and Scenic designation under Alternative C; under all other Alternatives, including the Preferred Alternative, no river segments would be recommended for Wild and Scenic designation. This approach is inadequate on many levels.</p> <p>First, as mentioned above, a river segment either is or is not Wild and Scenic eligible. If it is determined to be eligible under a 5(d)(1) study process, its eligibility should be noted across all alternatives, since this is an unchanging fact.</p> | <p>Eligibility is only part of the planning process for WSR designation. The alternatives portray a range of possible recommendations for designation. For a discussion, please see Section 2.3.9.</p> |
| 113 - 8 | <p>Second, as the rivers have been determined eligible, all Alternatives should discuss management actions that will be taken, if only in the interim, to protect the identified ORVs. The BLM Manual repeatedly emphasizes that all river segments identified as eligible at the outset of the planning process must be managed to protect their free-flowing characteristics and ORVs from any changes that would affect the rivers' eligibility or tentative classification. These interim protective measures must remain in place until final suitability decisions are made at the end of the RMP planning process, or until a final designation decision is made by Congress. See BLM Manual 8351 § .06(D), at 10; § .32, at 18-19; § .33, at 20, 23; § .52(C), at 34. The interim protective measures being implemented by BLM "shall be included in the RMP." Id. § .52(C) at 34. and BLM is required to provide public notification of its protective management measures "no later than public release of the draft RMP." Id. at § .32(C) at 19.</p> <p>The Draft RMP/EIS fails to comply with these requirements in several respects. First, it fails to set forth BLM's commitment to protecting all eligible rivers throughout the planning process. Second, it fails to include any discussion of the protection measures that will be used to safeguard the eligibility and tentative classification of all eligible rivers until a final suitability or designation decision is made. Third, there has been no 'public notification' regarding BLM's protective management of all eligible rivers in the Draft RMP/EIS or in any separate public notice document. Along with the Alaska Coalition, we request that BLM issue a Revised Draft RMP/EIS that complies with these requirements.</p> | <p>BLM was responsible for interim management of the ORVs of the proposed eligible WSR segments between the Draft RMP/EIS and the PRMP/FEIS. During this interim period, BLM monitored proposals for activities that might have impacted the ORVs. No actions were proposed or approved that would have impacted the potential suitability of any river segment analyzed.</p> <p>Please also see responses to comments 113-3 and 113-20 under Wild and Scenic Rivers.</p> |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 113 - 9 | An additional reason to issue a Revised Draft RMP/EIS lies with the inadequate documentation of the process arriving at an eligibility determination and the ORVs for each river segment determined eligible for Wild and Scenic designation. The Interagency Guidelines governing river designation under the WSRA provide that, “[w]hile only one outstandingly remarkable value is necessary for eligibility, the study report should carefully document all values of the river area.” In the Draft RMP/EIS, BLM provided a brief summary of its process describing eligibility and suitability in general. This short summary is not a ‘careful documentation’ of the outstandingly remarkable values (ORVs) for each river. BLM’s failure to include this documentation violates its mandate under the WSRA and NEPA. The statute requires BLM to provide a detailed description of the specific ORVs for each eligible river. Each “river study report will be a concise presentation of the information required in sections 4 (a) and 5 (c) of the Act as augmented by the Council on Environmental Quality regulations implementing the procedural provisions of the [NEPA].” 47 Fed. Reg. 39456. Without this information, the public cannot engage in informed decisionmaking. | Please see response to comment 113-3 under Wild and Scenic Rivers. |
| 113 - 10 | A Revised Draft RMP/EIS must “carefully document” and describe the unique and outstanding values of each eligible river. For instance, for rivers with ORVs based on the presence of fish and/or wildlife, the Draft RMP/EIS should, at a minimum, identify what fish and/or wildlife species are found within the river corridor and explain why they are outstandingly remarkable. Bare references to these values – e.g., “Scenic and recreational values” – are inadequate. | Please see response to comment 113-3 under Wild and Scenic Rivers. |
| 113 - 11 | Furthermore, as touched on above, the BLM should clearly and specifically provide for the protection of identified ORVs through management actions as part of the DRMP. | Please see responses to comments 113-3 and 113-20 under Wild and Scenic Rivers. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 113 - 20 | <p>BLM cannot base its decision to find a river ineligible for consideration on the fact that a portion of the river segment or the adjacent uplands are already owned by the State of Alaska, Native entities, or private landowners. By definition, the only eligible river segments under consideration in this RMP planning process are those that are at least partially on BLM-administered lands. If partial non-federal ownership is the basis for a non-suitability determination, BLM must provide a detailed explanation of how such ownership and jurisdictional issues would interfere with management to protect the river's ORVs.</p> <p>Similarly, it is not sufficient for BLM to rely on the State-selected, Native-selected, or Dual-selected status of rivers in making its proposed non-suitability determinations without providing any discussion of how these potential ownership and jurisdictional issues would interfere with management to protect the rivers' ORVs. The BLM Manual clearly contemplates that there will be some river segments within the NWSRS that are not federally managed or that are only partially federally managed.</p> | Please refer to Section 3.4.1.3 of the PRMP/FEIS for an explanation of the suitability determination. |
| 113 - 21 | <p>Finally, the Draft RMP/EIS failed to analyze the direct, indirect, and cumulative impacts of recommending rivers as suitable or un-suitable for designation, as required by NEPA. We request that BLM amend the Draft Plan to include an analysis of the specific impacts of designation or non-designation of each eligible river segment upon recreation opportunities, fisheries, wildlife, historic and cultural values, local economies, subsistence, scientific and educational opportunities, and all other significant impacts.</p> | <p>As per BLM planning guidelines, the Draft RMP/EIS identified 14 river segments that were eligible for WSR designation, and were evaluated for suitability in the PRMP/FEIS, incorporating comments received on the Draft RMP/EIS. Based on suitability criteria discussed in Chapter 3, none of these rivers were determined to be suitable for WSR designation. However, ORVs that were identified in the eligibility process will be taken into account for protection when evaluating permits for future proposed activities.</p> |
| 113 - 22 | <p>BLM Should Defer the Final RMP Suitability Decision</p> <p>In addition to the normal delay of suitability until the end of the RMP process, American Rivers also asks that the BLM use this RMP public process to collect information and conduct a preliminary suitability analysis, yet defer the final suitability decisions until after State and Native conveyances are completed. There is substantial uncertainty regarding which river areas will remain in federal ownership and which will be conveyed to the State and/or Native entities, due to over-selections and constantly changing State priorities. By making final non-suitability decisions in the face of such uncertainty, an eligible river's values would be permanently removed from the possibility of protection under the WSRA. Therefore, we submit that it is premature and inappropriate to make final suitability decisions and recommendations within this RMP.</p> | Please see response to comment 113-20 under Wild and Scenic Rivers. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|--|
| 113 - 23 | Additionally, we request that the BLM commit in the Final RMP/EIS to conduct a future suitability re-analysis for all eligible rivers that are retained under permanent BLM management. At that time, BLM should make the appropriate recommendations to Congress for inclusion in the national system or apply administrative measures to appropriately manage and enhance the outstandingly remarkable river-related values that have been inventoried and presented with this draft plan. | Please see response to comment 113-20 under Wild and Scenic Rivers. |
| 114 - 3 | Further, I would like to see the Chilkoot and Tsirku rivers designated as Wild and Scenic Rivers. Both rivers (particularly the Chilkoot) are under the onslaught of increased commercial tourism. Local officials lack either the will or the management authority to control this activity. Designation as a Wild and Scenic River could help provide a management framework. And, of course, both rivers truly are wild and scenic. | Thank you, comment acknowledged. |
| 119 - 18 | Thus, we strongly believe that BLM is now responsible for conservatively managing the recognized scenic and wildlife ORVs of the Chilligan River, regardless of whether the river is declared suitable for congressional designation into the National Wild & Scenic River System. Assignment of an appropriate alternative administrative designation, such as inclusion within the Neacola Mountains ACEC or as an Outstanding Natural Area (ONA), would help to ensure protective management of the Chilligan River's identified ORVs. | Please see responses to comments 113-13 under Special Management Areas, and 113-3 and 113-20 under Wild and Scenic Rivers. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|---|---|
| 119 - 25 | <p>The Interagency Guidelines governing river designation under the WSRA provide that, “[w]hile only one outstandingly remarkable value is necessary for eligibility, the study report should carefully document all values of the river area.” In the Draft RMP/EIS, BLM provided a brief summary of its process for determining whether to classify a river as Wild and Scenic pursuant to the WSRA. See Draft RMP/EIS at 2-32. However, a description of BLM’s process describing eligibility and suitability in general are not adequate to constitute a ‘careful documentation’ of the ORVs for each river.</p> <p>BLM’s failure to include this documentation violates its mandate under the WSRA. The statute requires BLM to provide a detailed description of the specific ORVs for each eligible river. BLM’s failure to do hinders informed decision-making and deprives the public of an opportunity to provide meaningful feedback.</p> <p>The Draft RMP/EIS must “carefully document” and describe the unique and outstanding values of each eligible river. For instance, for rivers with ORVs based on the presence of fish and/or wildlife, the Draft RMP/EIS should, at a minimum, identify what fish and/or wildlife species are found within the river corridor and explain why they are outstandingly remarkable. Similarly, for rivers with ORVs based on scenic, historic, cultural, and recreational values, the Draft RMP/EIS should, at the very least, include a description of the nature, type, and extent of the scenic, historic, cultural, and/or recreational values found within the river corridor, as well as a discussion of why they are outstandingly remarkable. Bare references to these values, e.g., “Scenic and recreational values,” are inadequate.</p> | <p>The referenced discussion from the Interagency Guidelines refers to reports required for rivers listed in Section 5A of the WSRA, and is inapplicable to the rivers under discussion in this PRMP/FEIS. Please see Section 3.4.1.3 for further information on the eligibility determination process.</p> |

Wild and Scenic Rivers

| Comment # | Comment | Response |
|-----------|---|---|
| 119 - 26 | <p>The BLM Manual repeatedly emphasizes that all river segments identified as eligible at the outset of the planning process must be managed to protect their free-flowing characteristics and ORVs from any changes that would affect the rivers' eligibility or tentative classification. These interim protective measures must remain in place until final suitability decisions are made at the end of the RMP planning process, or until a final designation decision is made by Congress. See BLM Manual 8351 § .06(D) at 10; § .32 at 18-19; § .33 at 20, 23; § .52(C) at 34. The interim protective measures BLM is implementing "shall be included in the RMP." Id. § .52(C) at 34. BLM is required to notify the public of its protective management measures "no later than public release of the Draft RMP." Id. at § .32(C) at 19.</p> <p>The Draft RMP/EIS fails to comply with these requirements in several respects. First, it fails to set forth BLM's commitment to protecting all eligible rivers throughout the planning process. Second, lacks any discussion of the protection measures that will be used to safeguard the eligibility and tentative classification of all eligible rivers until a final suitability or designation decision is made. Third, in the Draft RMP/EIS BLM has not notified the public of its protective management of all eligible rivers nor given such public notice separately. We request that BLM issue a Revised Draft RMP/EIS that complies with these requirements.</p> | Please see responses to comments 113-3 and 113-20 under Wild and Scenic Rivers. |
| 119 - 27 | <p>BLM Manual 8351 provides that, "all eligible river segments shall be evaluated for suitability or non-suitability using the BLM RMP process." BLM Manual 8351 § .33(A) at 20 (emphasis added). Moreover, the planning records and documents BLM prepared during the RMP process "must carefully describe all analyses and determinations made pursuant to this Manual," and a "narrative and rationale must be a part of the planning record and included as part of the RMP/EIS."</p> <p>Here, BLM failed to identify the number of rivers that were inventoried and reviewed for eligibility. It also failed to explicate its reasons for recommending 14 rivers for classification as wild and scenic in Alternative C. The Draft RMP/EIS lacked any discussion of the values that qualified these rivers for recommended classification in Alternative C or the reasons any others were disqualified. BLM Manual 8351 instructs BLM that "[a]t least one alternative shall provide for designation of all eligible river segments (under assessment in the RMP/EIS) in accordance with their tentative classifications."</p> | Additional information regarding the WSR analysis process is provided in Section 3.4.1.3. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 29 | For the three alternatives that fail to recommend the designation of a single eligible river, we urge BLM to analyze and present options for providing alternative potential means for protecting the ORVs of non-suitable rivers, including, but not limited to, land use designations such as ACECs, RNAs, ONAs, and SRMAs. | Please see responses to comments 113-3, 113-20, and 113-21 under Wild and Scenic Rivers. |
| 119 - 31 | We also request an opportunity to review and offer comments on any suitability analysis that may be in the record in which all thirteen factors were considered, including all materials that support that analysis, particularly public comments. | See responses to comments 113-3 and 113-20 in Wild and Scenic Rivers. |
| 119 - 32 | <p>BLM cannot designate a river as ineligible for consideration on the basis that a portion of the river segment or the adjacent uplands are already owned by the State of Alaska, Native entities, or private landowners. By definition, the only eligible river segments under consideration in this RMP planning process are those that are at least partially on BLM-administered lands. If partial non-federal ownership is the basis for a non-suitability determination, BLM must provide a detailed explanation of how such ownership and jurisdictional issues would interfere with management to protect the ORVs of each river.</p> <p>Similarly, it is not sufficient for BLM to rely on the State-selected, Native-selected, or dual-selected status of rivers in making its proposed non-suitability determinations without including in the RMP any discussion of how these potential ownership and jurisdictional issues would interfere with management to protect the rivers' ORVs. The BLM Manual clearly contemplates that there will be some river segments within the National Wild and Scenic River System that are not federally managed or that are only partially federally managed.</p> | Please see response to comment 113-20 under Wild and Scenic Rivers, and Section 3.4.1.3 in the PRMP/FEIS. |

Wild and Scenic Rivers

| <i>Comment #</i> | <i>Comment</i> | <i>Response</i> |
|------------------|--|---|
| 119 - 34 | <p>There is substantial uncertainty regarding which river areas will remain in Federal ownership and which will be conveyed to the State and/or Native entities due to over-selections and constantly changing State priorities. By making final non-suitability decisions in the face of such uncertainty, an eligible river's values would be permanently removed from the possibility of protection under the WSRA. Therefore, we submit that it is premature and inappropriate to make final suitability decisions and recommendations within this RMP.</p> <p>We recommend that BLM use this RMP public process to collect information and conduct a preliminary suitability analysis, yet defer the final suitability decisions until after State and Native conveyances are completed. Only at that time will the ownership status of the eligible rivers be fully known and the corresponding management challenges, if any, best understood. If eligible river values are managed in accordance with their tentative classifications, as required under BLM Manual 8351, the river status and eligibility will not be diminished in the interim.</p> <p>Additionally, we request that the BLM commit in the Final RMP/EIS to conduct a future suitability re-analysis for all eligible rivers that are retained under permanent BLM management. At that time, BLM should make the appropriate recommendations to Congress for inclusion in the national system or apply administrative measures to appropriately manage and enhance the ORVs that have been inventoried and presented with this draft plan.</p> | Please see response to comment 113-20 under Wild and Scenic Rivers. |

Wild and Scenic Rivers

| Comment # | Comment | Response |
|-----------|--|---|
| 119 - 35 | <p>We are disappointed that the Draft RMP/EIS did not acknowledge our 2004 scoping nomination for special protection for the wildlife habitat and brown bear populations along the BLM-managed portions of the Inskin River. BLM declares in the draft plan that the Inskin River qualifies as "eligible" for designation as a National Wild & Scenic River, however no protection is allocated for the river's ORVs. In the above cited email authored by Mr. Lloyd, BLM identified wildlife values (specifically the brown bears), recreation values (bear viewing and hunting), and "ecological function" as the river's "outstandingly remarkable values." We again remind BLM that only one ORV need exist to qualify a river as "eligible" for national designation and protection.</p> <p>According to BLM Manual 8351, all river segments identified as "eligible" for the National Wild & Scenic River System must be managed to protect their free-flowing characteristics and ORVs from any changes that would affect the rivers' eligibility or tentative classification. These interim protective measures must remain in place until final suitability decisions are made at the end of the RMP planning process, or until Congress makes a final designation decision. Therefore, we understand that BLM must protect the free-flowing nature and outstanding wildlife (brown bear) resources of the "eligible" Inskin River lands. In the Draft RMP/EIS, BLM fails to make such a commitment to protect the Inskin River's ORVs.</p> | <p>BLM was responsible for interim management of the ORVs of the proposed eligible WSR segments between the Draft RMP/EIS and the PRMP/FEIS. During this interim period, BLM monitored proposals for activities that might have impacted the ORVs. No actions were proposed or approved that would have impacted the potential suitability of any river segment analyzed.</p> <p>Please also see responses to comments 113-3 and 113-20 under Wild and Scenic Rivers. The section dealing with Alternatives Considered but not Analyzed Further, (Section 2.2 in the Proposed RMP/Final EIS) consolidated nominations for Special Management Areas, including Wild and Scenic Rivers.</p> |

End of section on Wild and Scenic Rivers

ATTACHMENT D
SUBMISSION INDEX

Ring of Fire Proposed RMP/ Final EIS

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--|--------------------------------|--|
| 1 | Dubber, Leonard | Haines, AK | |
| 2 | Woods, Jean | Palmer, AK | Matanuska Valley Sportsman |
| 3 | Coutts, Dick | Palmer, AK | Butte Community Council |
| 4 | Quaas, Agnes | Palmer, AK | |
| 5 | Quaas, Marty | Palmer, AK | |
| 6 | Buzby, Stacey | Palmer, AK | |
| 7 | James, Rachel | Anchorage, AK | Alaska Coalition |
| 8 | Fritz, Cecily | Palmer, AK | Knik River Watershed Group |
| 9 | Bingham, Carl | Palmer, AK | |
| 11 | Taygan, Will | Anchorage, AK | Knik Group, Alaska Chapter Sierra Club |
| 12 | Uhde, Eric | Anchorage, AK | Alaska Center for the Environment |
| 13 | Blair, Melissa | Anchorage, AK | Alaska Coalition |
| 14 | Clark, Todd | Anchorage, AK | Alaska Outdoor Access Alliance |
| 15 | Weishahn, Carolyn | Haines, AK | |
| 16 | Holle, Eric | Haines, AK | |
| 17 | Herminghaus, Trisha | Anchorage, AK | Alaska Quiet Rights Coalition |
| 18 | Robinson, James Robinson, Elizabeth | Phoenix, OR Phoenix, OR | |
| 19 | Alderson, Frances Alderson, George | Baltimore, MD Baltimore, MD | |
| 20 | Metz, Michele | Juneau, AK | Sealaska Corporation |
| 21 | Taylor, George | | |
| 22 | Howard, Robert | Palmer, AK | |
| 23 | Wells, Kathy | Palmer, AK | Friends of Mat-Su |
| 24 | Jones, Sev | Palmer, AK | Matanuska-Susitna Borough |
| 25 | Barber, Kenny | Palmer, AK | |
| 26 | Scott, Stephanie K. | Haines, AK | Haines Borough Assembly |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---|--------------------------|--|
| 27 | Heughins, Russ Katrud, Hal Case, Patrick Higdon, Charles DuBord, Jason Slapcinsky, Jodi Estlow, Ed Hesla, Chris Meyer, George Lively, John Zielinski, Ken Robertson, Preston Hovorka, Duane Trimberger, John McGlenn, John Riffle, Lew | | Idaho Wildlife Federation Stutsman County (ND) Wildlife Federation Golden State (CA) Flycasters California Division - Izaak Walton League North Dakota Wildlife Federation North Florida Fly Fishers Minnesota Fly Fishers South Dakota Wildlife Federation Wisconsin Wildlife Federation Twin Tiers Five Rivers Fly Fishers (NY) Milwaukee Lake & Stream Fly Fishers (WI) Florida Wildlife Federation Nebraska Wildlife Federation Michigan Division - Izaak Walton League Washington Wildlife Federation Santa Barbara Flyfishers |
| 28 | Abshire, Kristine A. | Wasilla, AK | Alaskans for Palmer Hay Flats SGR |
| 29 | Clark, Todd | Anchorage, AK | Alaska Outdoor Access Alliance |
| 30 | Clark, Vicki | Anchorage, AK | Trustees for Alaska |
| 31 | Drehn, Darryl Erickson, Jeanine Frey, Lucille J. Coutts, Dick | Palmer, AK | Butte Community Council Butte Community Council Butte Community Council Butte Community Council |
| 32 | Quaas, Marty Quaas, Agnes | Palmer, AK Palmer, AK | |
| 33 | Fries, Carol | Anchorage, AK | Alaska Department of Natural Resources |
| 34 | Berland, Nancy | Haines, AK | Lynn Canal Conservation, Inc. |
| 35 | Wade, Doug | Chickaloon, AK | NAV DINI AA NA (CHICKALOON VILLAGE) |
| 36 | Banks, David | Anchorage, AK | The Nature Conservancy |
| 37 | Woods, Jean | Palmer, AK | |
| 38 | Davis, Howard T. | Clam Gulch, AK | |
| 39 | Byrnes, James M. | Eagle River, AK | |
| 40 | Dadourian, Laurie | Haines, AK | |
| 41 | Borell, Steven C. | Anchorage, AK | Alaska Miners Association, Inc. |
| 42 | Reichgott, Christine B. | Seattle, WA | Environmental Protection Agency |
| 43 | McGuire, Sally | Haines, AK | |
| 45 | Hatton, Elizabeth | Anchorage, AK | Alaska Quiet Rights Coalition |
| 46 | Hansen, Michael | Chugiak, AK | |
| 47 | Fritz, Cecily | Palmer, AK | Knik River Watershed Group |

Ring of Fire Proposed RMP/ Final EIS

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------|--------------------|--|
| 48 | Arnesen, Jim | Eagle River, AK | Eklutna, Inc. |
| 49 | Wilson, Jennifer | Anchorage, AK | Department of Transportation & Public Facilities |
| 50 | Woods, Noel W. | Palmer, AK | Matanuska Valley Sportsman |
| 51 | Larson, June | York, SC | Pug Lovers Rescue |
| 52 | Wood, Margaret | Suffolk, VA | |
| 53 | Brogan, Loretta | Shreveport, LA | |
| 54 | Taygan, Will | Anchorage, AK | Knik Group, Alaska Chapter Sierra Club |
| 55 | Weishahn, Carolyn | Haines, AK | |
| 56 | Kolehmainen, Karol | | |
| 57 | Sachau, B. | Florham Park, NJ | |
| 58 | Harlib, Amy | New York, NY | |
| 59 | Fritz, Cecily | Palmer, AK | Knik River Watershed Group |
| 60 | Denison, James | Long Beach, CA | |
| 61 | Gille, Greg | Bellevue, WA | |
| 62 | Culbeck, Darsie | Haines, AK | Alaska Mountain Guides |
| 63 | Cone, Frances | Pawleys Island, SC | |
| 64 | Huggins, William | Las Vegas, NV | |
| 65 | Griffin, Dorothy | Albany, GA | |
| 66 | Gage, Cathy | Guelph, ON | |
| 67 | Lancaster, Emily | Guelph, ON | |
| 68 | Nelson, Hazel | Haines, AK | |
| | Nelson, Ardis | Haines, AK | |
| | Piper, Nancy | Haines, AK | |
| | Nelson, Irene | Juneau, AK | |
| | Nelson, Paul | Haines, AK | |
| 69 | Justice, Stan | Fairbanks, AK | |
| 70 | Dixon, Jerry S. | | |
| 71 | McDonough, Tim | Haines, AK | |
| 72 | Crane, Steve | Soldotna, AK | |
| 73 | Bragg, Dawn | | Alaskans for Palmer Hay Flats SGR |
| 74 | Vogt, Deborah | Haines, AK | Haines Borough Assembly |
| 75 | Lushear, Carol | Dunedin, FL | |
| 76 | Fine, Doug | | |
| 77 | Brown, Carle L. | Portsmouth, NH | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---|---|--|
| 78 | Flowers, Chris | Anchorage, AK | |
| 79 | Prang, Tom | | |
| 80 | Sundberg, Scott | | Southeast Alaska Backcountry Adventures |
| 81 | Libenson, Sue | Haines, AK | Alaska Coalition |
| 82 | Olson, Drake | | ECA, Inc. |
| 83 | Wacker, William | Haines, AK | |
| 84 | Sheldon, Burl | Haines, AK | |
| 85 | Olsen, Susan | Anchorage, AK | Alaska Resource Advisory Council |
| 86 | Triplett, Tia | Los Angeles, CA | |
| 87 | Lively, Brigitte | Palmer, AK | |
| 88 | Crupi, Lori | Haines, AK | Haines Borough Assembly |
| 89 | Crupi, Anthony | Haines, AK | |
| 90 | Crupi, Elias | Haines, AK | |
| 91 | Meacham, Thomas E. | Anchorage, AK | |
| 92 | Smith, Norman L. | Haines, AK | |
| 93 | Dugan, Robert G. | Girdwood, AK | |
| 94 | Dixon, Jerry S. | | |
| 95 | Thurmond, Roberta | Hixson, TN | |
| 96 | McGinness, Doris | Des Plaines, IL | |
| 97 | Chasse, Joe | Ocean Park, WA | |
| 98 | Deatherage, Karen James, Rachel Virgin, Randy Huffines, Eleanor Toppenberg, John Carey, Scott Kirsch, Katya Forman, Paul | Anchorage, AK Anchorage, AK Anchorage, AK | Defenders of Wildlife Alaska Coalition Alaska Center for the Environment The Wilderness Society Alaska Wildlife Alliance Lynn Canal Conservation Southeast Alaska Conservation Council Sierra Club - Alaska Chapter |
| 99 | Kittleson, Marcia | Springfield, MO | |
| 100 | Cone, Frances | Pawleys Island, SC | |
| 101 | Gregory, Branwen | Los Angeles, CA | |
| 102 | McCleary, Harriet | Minneapolis, MN | |
| 103 | Cummings, Terry | Anchorage, AK | |
| 104 | Gille, Greg | Bellevue, WA | |
| 105 | Lancaster, Emily | Guelph, ON | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------|------------------|---|
| 106 | Jonas, Mark | | |
| 107 | Leach, Tim | Palmer, AK | |
| 108 | Wright, Heather | Houghton, MI | |
| 109 | Dugan, Tory M. | Girdwood, AK | |
| 110 | Taygan, Will | Anchorage, AK | Knik Group, Alaska Chapter Sierra Club |
| 111 | Blank, Patricia | Haines, AK | |
| 112 | Clark, Todd | Anchorage, AK | Alaska Outdoor Access Alliance |
| 113 | McKew, Quinn | | American Rivers |
| 114 | McGuire, Thomas V. | Haines, AK | |
| 115 | Latta, Natasha | Valdez, AK | |
| 116 | Danford, Frank | | |
| 117 | Heitman, Carolyn | | |
| 118 | Dorstenia, Kaj | Copenhagen, | |
| 119 | Gibbins, Jennifer | Cordova, AK | Eyak Preservation Council |
| | Shavelson, Bob | Homer, AK | Cook Inlet Keeper |
| | Goll, Betsy | Anchorage, AK | Sierra Club |
| | Fresco, Nancy | Fairbanks, AK | Northern Alaska Environmental Center |
| | Stratton, Jim | Anchorage, AK | National Parks Conservation Association |
| | Scott, Gabriel | Cordova, AK | Cascadia Wildlands |
| | Bristol, Tim | Juneau, AK | Trout Unlimited |
| | Ritzman, Dan | Anchorage, AK | Alaska Coalition |
| | Virgin, Randy | Anchorage, AK | Alaska Center for the Environment |
| | Williams, Deborah | Anchorage, AK | Alaska Conservation Solutions |
| | Huffines, Eleanor | Anchorage, AK | The Wilderness Society |
| | Rait, Ken | Portland, OR | Campaign for America's Wilderness |
| 120 | Jones, David H. | Seattle, WA | |
| 121 | Schlacter, Judith | Eugene, OR | |
| 122 | Moran, Kate | Bolingbrook, IL | |
| 123 | Herndon, Laura | Burbank, CA | |
| 124 | Chisholm, Holly | Oxford, MI | |
| 125 | Ekman, Lea | Alexandria, VA | |
| 126 | Gutkowski, Marie | Ridgewood, NY | |
| 127 | Triplett, Tia | Los Angeles, CA | |
| 128 | Voorhies, Marilyn | West Tremont, ME | |
| | Voorhies, Bill | West Tremont, ME | |
| 129 | Shukla, H. | Cleveland, OH | |
| 130 | Swanson, Scott | Austin, TX | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---------------------------------------|------------------------|----------------------|
| 131 | Wall, James | Arnold, MO | |
| 132 | Clemens, Kimberly | Shillington, PA | |
| 133 | Nissl, Jan | Boise, ID | |
| 134 | Rosenkrantz, Stewart | Pompano Beach, F | |
| 135 | Thurmond, Roberta | Hixson, TN | |
| 136 | Eades, Debra | Greenville, SC | |
| 137 | Pratt, Don | Lexington, KY | |
| 138 | Waldron, Robert | Austin, TX | |
| 139 | Smith, Karen | Eastlake, OH | |
| 140 | Lemke, Melissa | Glens Falls, NY | |
| 141 | Ashton, Ann | Baltimore, MD | |
| 142 | Camara, Tom | Mill Valley, CA | |
| 143 | Rozelle, Shanna | Plano, TX | |
| 144 | Gilbert, Valerie | New York, NY | |
| 145 | Silver, Ronald H. | Atlantic Beach, FL | |
| 146 | Rothstein, Richard Rothstein, Lori | Miami, FL Miami, FL | |
| 147 | Acevedo, N. K. | Revere, MA | |
| 148 | Kirschling, Karen | San Francisco, CA | |
| 149 | Giniewicz, Deborah | North Oxford, MA | |
| 150 | Tostenson, Kimberly | Evansville, MN | |
| 151 | Turek, Gabriella | Pasadena, CA | |
| 152 | Jobe, Susan | Afton, MN | |
| 153 | Riley, Kelly | Hummelstown, PA | |
| 154 | Tribble, David | Lees Summit, MO | |
| 155 | Mohn, Cynthia | Campbell, OH | |
| 156 | Shalat, Harriet | Forest Hills, NY | |
| 157 | Sanchez, A.J. | Bartlesville, OK | |
| 158 | Lavoie, Monique | Amherst, QC | |
| 159 | Seaman, Richard | Evanston, IL | |
| 160 | Douglas, Virginia | Elyria, OH | |
| 161 | Picciotti, Melanie | Rochester, NY | |
| 162 | Adelman, Charlotte | Wilmette, IL | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------|--------------------|----------------------|
| 163 | Lareau, Audrey | Redwood City, CA | |
| 164 | Strebeck, Robert | Eules, TX | |
| 165 | Wall, James | Arnold, MO | |
| 166 | Daniel, Shively | Indiana, PA | |
| 167 | Smith, Stuart | Olympia, WA | |
| 168 | Vincent, Judith | Independence, OR | |
| 169 | Leeson, Mark | Orwigsburg, PA | |
| 170 | Wilson, Jerry | Finleyville, PA | |
| 171 | Moss, Paul | White Bear Lake, | |
| 172 | Hunt, Otto J. | Oceanside, CA | |
| 173 | Singer, Barbara | Chicago, IL | |
| 174 | Conn, Craig C. | Pittsburgh, PA | |
| 175 | Hunrichs, Paul | Santee, CA | |
| 176 | Larson, June | York, SC | Pug Lovers Rescue |
| 177 | Coviello, Gina | Ontario, NY | |
| 178 | Jobe, Susan | Afton, MN | |
| 179 | Brensinger, Elizabeth | New Tripoli, PA | |
| 180 | Trepes, Karen | Hammondsport, N | |
| 181 | Rush, Charlene | Pittsburgh, PA | |
| 182 | Breiding, Joan | San Francisco, CA | |
| 183 | Delker, Jennifer | Salt Lake City, UT | |
| 184 | Grasso, Dori | Cockeysville, MD | |
| 185 | Young, Jane | Catskill, NY | |
| 186 | Neiman, Karl | Arnold, PA | |
| 187 | Reina-Rosenbaum, Rose | Hillsborough, NJ | |
| 188 | Gabrisko, Tracie | New Lenox, IL | |
| 189 | Kirby, Alison | Wooster, OH | |
| 190 | DeFranco, Adam | North San Juan, C | |
| 191 | Bettmann, Joanna | Torrey, UT | |
| 192 | Reina-Rosenbaum, Rose | Hillsborough, NJ | |
| 193 | Babst, Christina | West Hollywood, C | |
| 194 | Seth, Barry | Deefield, IL | |
| 195 | Berglas, Silvia | Highland, CA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------------|-------------------|----------------------|
| 196 | Kautz, Katherine | Northglenn, CO | |
| 197 | Fouroux III, Henri Andre | New Orleans, LA | |
| 198 | Newman, Roberta E. | Mill Valley, CA | |
| 199 | Foskett, Mary Anna | Arlington, MA | |
| 200 | Beam, John | Phillipsburg, NJ | |
| 201 | Ferry, Susan | Princeton, NJ | |
| 202 | Rymer, Carlos | Ithaca, NY | |
| 203 | Gols, L. | Natick, MA | |
| 204 | Hodapp, Natalie | Mankato, MN | |
| 205 | Duncan, Michael | Buena Park, CA | |
| 206 | Sayago, Maria Sara | Placerville, CA | |
| 207 | McClintock, Cathy | Tucson, AZ | |
| 208 | Harlib, Amy | New York, NY | |
| 209 | Capotorto, Jeanette | Commack, NY | |
| 210 | Rodrigue, Jim | Gardiner, ME | |
| 211 | Welch, Joanna | Crescent City, CA | |
| 212 | Chesnutt, Judy | Brooklyn, NY | |
| 213 | Clift, Philip A. | Fulton, NY | |
| 214 | Kopp, Helen | Grafton, OH | |
| 215 | Bell, Ray | Bakersfield, CA | |
| 216 | Sexton, Mike | Junction City, KS | |
| 217 | Durham, Crystal | Reidsville, NC | |
| 218 | Burack, Debbie | New York, NY | |
| 219 | Halligan, Mary | Houston, TX | |
| 220 | Gunn, Mardell | Haines, AK | |
| 221 | Hensley, Candi | Kingsport, TN | |
| 222 | Osterberg, Nils | White Plains, NY | |
| 223 | Daniels, J. Scott | Houston, TX | |
| 224 | Hunt, Otto J. | Oceanside, CA | |
| 226 | Harrington, Sue | Piedmont, CA | |
| 227 | Updike, Kelley | Jacksonville, FL | |
| 228 | Ashton, Chris | La Mesa, CA | |
| 229 | Strader, Dow | Austin, TX | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------|---------------------|----------------------|
| 230 | Eagle, Nee | Brooklyn, NY | |
| 231 | Getz, Caroline | Hollywood, FL | |
| 232 | Delker, Jennifer | Salt Lake City, UT | |
| 233 | Smith, Diana | Seattle, WA | |
| 234 | Busse, Barbara | Phoenix, AZ | |
| 235 | Allred, Frances | El Prado, NM | |
| 236 | Brenner, Jared | New York, NY | |
| 237 | Boldt, Todd | Urbandale, IA | |
| 238 | Dale, Adrienne | Ann Arbor, MI | |
| 239 | Branyan, Jane | Marysville, PA | |
| 240 | Woods, James | Penn Valley, CA | |
| 241 | Dugan, Julia | Marysville, PA | |
| 242 | Campbell, Alicia | Manhattan Beach, | |
| 243 | Blake, Seana | Ellensburg, WA | |
| 244 | Pedersen, John | Nampa, ID | |
| 245 | Gannon, Michele | Mooresville, IN | |
| 246 | Schwartz, Sally | Milwaukee, WI | |
| 247 | Dolney, Rachel | Winter Park, FL | |
| 248 | Ledgerwood, Lynn | Olympia, WA | |
| 249 | Benenati, Scott | Westminster, CO | |
| 250 | Zajic, Daniel | North Haverhill, NH | |
| 251 | Seaman, Richard | Evanston, IL | |
| 252 | Hobbs, Melissa | Grand Ridge, FL | |
| 253 | Castellon, Leigh | El Cerrito, CA | |
| 254 | Hughes, Judy | Meredith, NH | |
| 255 | Rush, Charlene | Pittsburgh, PA | |
| 256 | Vesely, Sak | Oakland, CA | |
| 257 | Baker McCain, Melanie | Omaha, NE | |
| 258 | Gore, Jesse | Nashville, TN | |
| 259 | Yakel, Michelle | Turtle Creek, PA | |
| 260 | Benge, Regina K. | Brodhead, KY | |
| 261 | Bonilla-Jones, Carmen | Venice, FL | |
| 262 | Grasso, Dori | Cockeysville, MD | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------------------|------------------------------------|----------------------|
| 263 | Phillips, Janice | Kernersville, NC | |
| 264 | Kennedy, Bill | Kearns, UT | |
| 265 | Pollock, Jeri | Tujunga, CA | |
| 266 | Daniel, Marc | Mount Vernon, WA | |
| 267 | Devine, Lauren | Boca Raton, FL | |
| 268 | Lareau, Audrey | Redwood City, CA | |
| 269 | O'Sullivan, Joseph | Flushing, NY | |
| 270 | Burch, David Paul Xavier | South Bend, IN | |
| 271 | Wright, Heather | Houghton, MI | |
| 272 | Zeinstra, Juanita | Belmont, MI | |
| 273 | McGinness, Doris | Des Plaines, IL | |
| 274 | Daniels, J. Scott | Houston, TX | |
| 275 | Updike, Kelley | Jacksonville, FL | |
| 276 | Keefer, Nina | Longmont, CO | |
| 277 | Strader, Dow | Austin, TX | |
| 278 | Eagle, Nee | Brooklyn, NY | |
| 279 | Getz, Caroline | Hollywood, FL | |
| 280 | Smilyanov, Dimitar | Schenectady, NY | |
| 281 | Perlman, Frances | West Paris, ME | |
| 282 | Maddox, Charles | Broadway, VA | |
| 283 | Ramos, Miguel | Bellingham, WA | |
| 284 | Miller, Nancy | Prescott, AZ | |
| 285 | Esra, Nijn | Heilig Landstichting | |
| 286 | Pavitt, Bridget | London, UK | |
| 287 | Jud, Daniel | Eugene, OR | |
| 288 | Jaslow, Douglas | Arlington, VA | |
| 289 | Silver, Ronald H. | Atlantic Beach, FL | |
| 290 | Chriest, Sheryl Chriest, Shawn | Eagle River, AK Eagle River, AK | |
| 291 | Galiati, Ronald J. | San Diego, CA | |
| 292 | Miller, Nancy | Prescott, AZ | |
| 293 | Silver, Margaret | Atlantic Beach, FL | |
| 294 | Guthrie, Barbara | Seattle, WA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|------------------------|--------------------|----------------------|
| 295 | M., Lexi | Seaside, CA | |
| 296 | Vertrees, Gerald | Golden Valley, AZ | |
| 298 | Heasley, Lenora | Williams, AZ | |
| 300 | X, Paula | TX | |
| 301 | Rehn, Debra | Portland, OR | |
| 302 | Yung, Jackie | Salem, OR | |
| 303 | Conn, Craig C. | Pittsburgh, PA | |
| 304 | Neiman, Karl | Arnold, PA | |
| 305 | Musen, Arthur | Longmeadow, MA | |
| 306 | Zalewski, Kimberly | Livonia, MI | |
| 307 | Souza, Michael | San Diego, CA | |
| 308 | Stepanski, Dusty | Richwood, NJ | |
| 309 | Grueschow Jr., Kenneth | Milwaukee, WI | |
| 310 | Negri, Regina | Hillsdale, NY | |
| 311 | Graham, Kimberley | Coronado, CA | |
| 312 | McGlone, Colleen | New Port Richey, F | |
| 313 | Hutchison, Phyllis | Paducah, KY | |
| 314 | Riolo, Marion | Crotone, | |
| 315 | Klein, E. | Portsmouth, NH | |
| 316 | Street, Griffin | Seattle, WA | |
| 317 | Starr, Julie | South San Francis | |
| 318 | Santerre, Roger | New Paltz, NY | |
| 319 | Barkla, Paul | River Falls, WI | |
| 320 | Levy, Andrea | Toronto, ON | |
| 321 | Chasse, Joe | Ocean Park, WA | |
| 322 | Berman, Nancy | Berkeley, CA | |
| 323 | Sanders, David | Glendora, CA | |
| 324 | Cherry, Mary | Bronx, NY | |
| 325 | Georgiou, Christine | Bronx, NY | |
| 326 | Yates, Joan | Scarborough, ME | |
| 327 | Quire, Mark | Nederland, CO | |
| 328 | Miller, Janet | Burbank, CA | |
| 329 | Leeson, Mark | Orwigsburg, PA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|----------------------------|---------------------|----------------------|
| 330 | Ledden, Dennis | Rancho Murieta, C | |
| 331 | Major, Mark | Phoenix, AZ | |
| 332 | Halligan, Mary | Houston, TX | |
| 333 | Kittleson, Marcia | Springfield, MO | |
| 334 | Durham, Crystal | Reidsville, NC | |
| 335 | Wilson, Jerry | Finleyville, PA | |
| 336 | Lytle, Denise | Fords, NJ | |
| 337 | Mikalsen, Claire | Pullman, WA | |
| 338 | Moss, Paul | White Bear Lake, | |
| 339 | LaSchiava, Dona | Phoenix, AZ | |
| 340 | Young, Jane | Catskill, NY | |
| 341 | Barton, Roberta | Albuquerque, NM | |
| 342 | Pethers, Katrina | Brisbane, | |
| 343 | Douglas, Virginia | Elyria, OH | |
| 344 | Gentile, Ronald | Ozone Park, NY | |
| 345 | Mastenbrook, Marianne | Minnesota City, MN | |
| 346 | Dollyhigh, Adrienne | Mount Airy, NC | |
| 347 | Phillips, Patricia | Kent, OH | |
| 348 | Sayago, Maria Sara | Placerville, CA | |
| 349 | Marchese, John | Henderson, NV | |
| 350 | Curotto, John | Quinebaug, CT | |
| 351 | Murphy, Ryan | Berlin, MD | |
| 352 | Kelly, Wayne | Ashland, OR | |
| 353 | Green, Jason J. | Stanardsville, VA | |
| 354 | Reede, Tim | Minneapolis, MN | |
| 355 | Gutman, Mark | Meiers Lake, AK | |
| 356 | Russell, Matthew | Loxahatchee, FL | |
| 357 | Hutchinson, Dr. Terrance A | California City, CA | |
| 358 | Wilmore, Seth | Solon, OH | |
| 359 | Babiak, Katherine | New York, NY | |
| 360 | Snead, Phyllis | Camp Creek, WV | |
| 361 | Picciotti, Melanie | Rochester, NY | |
| 362 | Boswell, Harold | Seattle, WA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-------------------|--------------------|----------------------|
| 363 | Lien, David | Colorado Springs, | |
| 364 | Modarelli, David | Akron, OH | |
| 365 | Mitchell, Karen | Baltimore, MD | |
| 366 | Bell, Ray | Bakersfield, CA | |
| 367 | Grover, Ravi | Chicago, IL | |
| 368 | Premilall, Anandi | South Ozone Park, | |
| 369 | Martin, Donna | Chesterville, OH | |
| 370 | Rymer, Carlos | Ithaca, NY | |
| 371 | Bandy, Paula | Clearwater, FL | |
| 372 | Russell, Laura | Tampa, FL | |
| 373 | Adams, Kathleen | Hamilton, NJ | |
| 374 | Cooper, Jill | Bellevue, WA | |
| 375 | Rhoads, Kirk | Mountain Home, A | |
| 376 | Colon, Jannice | Lake Hopatcong, N | |
| 377 | Brooks, C. Wayne | Port Orange, FL | |
| 378 | Seth, Barry | Deefield, IL | |
| 379 | Clark, Martina | Westhampton, NJ | |
| 380 | Walters, L. | Virginia Beach, VA | |
| 381 | Becker, Marilyn | Fords, NJ | |
| 382 | Bixler, Simona | Manassas, VA | |
| 383 | Zimny, Gloria | Richmond, MI | |
| 384 | Rusch, Denyce | Fairfield, IA | |
| 385 | Werner, Kirstyn | Riverside, CA | |
| 386 | Wilson, John | Woodbury, MN | |
| 387 | Hughes, Brendan | Springfield, IL | |
| 388 | Baureis, Regina | Whitehouse Station | |
| 389 | Graf, Rosemary | Cummington, MA | |
| 390 | Navarrete, Patty | Taos, NM | |
| 391 | Pan, Pinky Jain | Santa Rosa, CA | |
| 392 | Fasczcewski, Joan | Springfield, NJ | |
| 393 | Thomson, Arran | Portland, OR | |
| 394 | Sternberg, Lewis | Tigard, OR | |
| 395 | Amato, Gwendoline | East Greenwich, RI | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------|-------------------|----------------------|
| 396 | Breiding, Joan | San Francisco, CA | |
| 397 | Lewis, Judi | Omaha, NE | |
| 398 | DeSousa, Sarah | Spring Branch, TX | |
| 399 | Root, Charlene | Whittier, CA | |
| 400 | Ferris, C. | Pollock Pines, CA | |
| 401 | Costeas, Lanie | Chicago, IL | |
| 402 | Mastri, Frank | Bridgeport, CT | |
| 403 | Donnici, Anthony | Kansas City, MO | |
| 404 | Fairfield, John | San Francisco, CA | |
| 405 | Perry, Mary-Ellen | Cambridge, MA | |
| 406 | Johnson, Curtis | Green River, WY | |
| 407 | Obudzinski, Dirk | Sedona, AZ | |
| 408 | Mastri, Frank | Bridgeport, CT | |
| 409 | Bellemare, Renee' | North Berwick, ME | |
| 410 | Graziosa, Sara | East Canaan, CT | |
| 411 | Ely, Thomas | Haines, AK | |
| 412 | Herdliiska, Robert | Tucson, AZ | |
| 413 | Kosar, Mary Lou | Newton Falls, OH | |
| 414 | Voorhies, Bill | West Tremont, ME | |
| 415 | Lynch, Gail | Nashua, NH | |
| 416 | Lynch, Gail | Nashua, NH | |
| 417 | Mustich, Joseph A. | Washington, CT | |
| 418 | Ford, James | Southport, CT | |
| 419 | Mohn, Cynthia | Campbell, OH | |
| 420 | Williams-West, Jeanie | Mer Rouge, LA | |
| 421 | Meyer, Robert G. | Flagstaff, AZ | |
| 422 | Comeskey, John | Dayton, OH | |
| 423 | Sherzer, Harry | Foster, RI | |
| 424 | Oberg, Pamela | Somersworth, NH | |
| 425 | Reina-Rosenbaum, Rose | Hillsborough, NJ | |
| 426 | Baron, Stewart | Tucson, AZ | |
| 427 | Hyatt, Donald | Columbus, OH | |
| 428 | Olnas, Juli | Lake Bluff, IL | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------------|--------------------|----------------------|
| 429 | dePadova, E. | Parsippany, NJ | |
| 430 | Koteles, Patty | Broadview Heights, | |
| 431 | Hafer, Sarah | Eugene, OR | |
| 432 | Fenster, Steven | Piscataway, NJ | |
| 433 | Oseman, Nance | Carlotta, CA | |
| 434 | Cueny, Colleen | Ferndale, MI | |
| 435 | Pattantyus, Nik | Ardmore, PA | |
| 436 | Foskett, Mary Anna | Arlington, MA | |
| 437 | Kirby, Alison | Wooster, OH | |
| 438 | Loria, Steven | Garrison, NY | |
| 439 | Dunkleberger, David | Doylestown, PA | |
| 440 | Martinez, Doreen E. | Flagstaff, AZ | |
| 441 | Fouroux III, Henri Andre | New Orleans, LA | |
| 442 | Hval, Patricia | Westerly, RI | |
| 443 | Wyse, Frank | Mesa, AZ | |
| 444 | Hunt, Becklau | Cincinnati, OH | |
| 445 | Hettinger, Ann | Champaign, IL | |
| 446 | Buehl, Barbara | Eden Prairie, MN | |
| 447 | Woods, Julie | Chelsea, MI | |
| 448 | Murray, Cristy | Oregon City, OR | |
| 449 | Taylor, LeeAnn | Chico, CA | |
| 450 | Figueiredo, Eva | Lisboa, AL | |
| 451 | Plato, Barry | Bel Air, MD | |
| 452 | Coviello, Gina | Ontario, NY | |
| 453 | Simmons, Barre | Springfield, VA | |
| 454 | Haskell, Michael | Scarborough, ME | |
| 455 | Ploeg, Johan F. | Cloverdale, OR | |
| 456 | Fogleman, Maxwell | Prescott, AZ | |
| 457 | Eiterman, Elisabeth | Columbus, OH | |
| 458 | Yurkiw, Dorothy | Lakewood, OH | |
| 459 | Kulcsar, michael | Euclid, OH | |
| 460 | Koenig, Stephen | Holland, PA | |
| 461 | Cox, Vickie | Enumclaw, WA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------|-------------------|----------------------|
| 462 | Rosales, Lisa | Chillicothe, OH | |
| 463 | Vincent, Judith | Independence, OR | |
| 464 | McCoy, Cherie | Kettering, OH | |
| 465 | Cail, Bonnie | Kettering, OH | |
| 466 | Stauffer, Sybil | Dayton, OH | |
| 467 | Mullen, Elizabeth J. | Hamilton, OH | |
| 468 | Cosgriff, Mark | Lakewood, OH | |
| 469 | Romans, Jennifer | Lake Forest, IL | |
| 470 | Kurland, Miriam Beth | Mansfield Center, | |
| 471 | Doyle, Patricia | Garrettsville, OH | |
| 472 | Engstrom, Neil | Lincoln, NE | |
| 473 | Martin-Brodak, Diane | Holly, MI | |
| 474 | Smith, Deanna | Phoenix, AZ | |
| 475 | Joranko, Roberta | Columbus, OH | |
| 476 | Lopez, Carmen | Cham, | |
| 477 | Bixler, Simona | Manassas, VA | |
| 478 | Berg, Samuel | Newberg, OR | |
| 479 | Wolf, Susan | Cherry Hill, NJ | |
| 480 | Tildes, Katherine | Athens, OH | |
| 481 | Giammatteo, Joseph | Cabin John, MD | |
| 482 | Hand, David | Garnerville, NY | |
| 483 | Thu, Eric | Tucson, AZ | |
| 484 | Jerden, Beverly | Sherwood, OR | |
| 485 | Metcalf, Steve | Warwick, RI | |
| 486 | McCleary, Harriet | Minneapolis, MN | |
| 487 | Stahl, Charlotte | Gresham, OR | |
| 488 | Hydinger, Carol | Columbus, OH | |
| 489 | Bebber-Wells, Rebecca | Brooklyn, WI | |
| 490 | Hessel, Sue | Lyme, CT | |
| 491 | Dunham, Christopher | Bridgeport, CT | |
| 492 | Strebeck, Robert | Euless, TX | |
| 493 | Murphy, Ryan | Berlin, MD | |
| 494 | Mayo, Michael John | Syracuse, NY | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---------------------|---------------------|----------------------|
| 495 | Wasman, Donna | Sevierville, TN | |
| 496 | Schwarz, Charles | Intervale, NH | |
| 497 | Poulson, Judi | Fairmont, MN | |
| 498 | Jacobsen, Paul | Dallas, OR | |
| 499 | Hafer, Sarah | Eugene, OR | |
| 500 | Clark, Stuart G. | Waterford, MI | |
| 501 | Cross, Heather | Redford, MI | |
| 502 | Rae, Erika | Saint Paul, MN | |
| 503 | Hill, William Kay | Portland, OR | |
| 504 | Huber, Alycia | Tularosa, NM | |
| 505 | Family, Zmuda | Chillicothe, OH | |
| 506 | Cassidy, Doris | Yuma, AZ | |
| 507 | Hermann, Richard | Richmond, VA | |
| 508 | Moore, Audrey | Selma, OR | |
| 509 | Burns, David | Bay City, MI | |
| 510 | Martin, Diane | Scottsdale, AZ | |
| 511 | Mitchell, Glen | Blacksburg, VA | |
| 512 | Taylor, LeeAnn | Chico, CA | |
| 513 | Gibbs-Halm, Deborah | Grand Blanc, MI | |
| 514 | Newton, Peter | Tucson, AZ | |
| 515 | Ferguson, Joanne | Sheffield Lake, OH | |
| 516 | Hyland, Anne | Falmouth, ME | |
| 517 | Knox, Janet | Gainesville, VA | |
| 518 | Saecker, John | Edina, MN | |
| 519 | Escobar, Annette | Miami, FL | |
| 520 | Sullivan, Kate | Satellite Beach, FL | |
| 521 | Jones, Gloria | Hialeah, FL | |
| 522 | Luke, Keth | New Port Richey, F | |
| 523 | Patrello, S. | Hudson, FL | |
| 524 | Chinni, Adrienne | Cleveland Heights, | |
| 525 | Fogler, Marah | Tucson, AZ | |
| 526 | Hyatt, Donald | Columbus, OH | |
| 527 | Wieland, Loren | Fort Myers, FL | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------------|---------------------|----------------------|
| 528 | Murphy, Emmett J. | Venice, FL | |
| 529 | Gomez, Maria | Mountain Home, A | |
| 530 | Moreno, Olyme | Miami, FL | |
| 531 | Kuny, Megaera | Point Of Rocks, M | |
| 532 | Woerpel, D.V.M., Richard W. | Simi Valley, CA | |
| 533 | Doran, Bonnie | Placerville, CA | |
| 534 | Chapin, Ginger | Greenwich, CT | |
| 535 | Field, Kimberly | North Palm Beach, | |
| 536 | Coon, Julie | Lima, OH | |
| 537 | Enevoldsen, David | San Jose, CA | |
| 538 | Newman, Roberta E. | Mill Valley, CA | |
| 539 | Wold, Amy | Rochester, MN | |
| 540 | Jones, David H. | Seattle, WA | |
| 541 | Shively, Daniel | Indiana, PA | |
| 542 | Lien, David | Colorado Springs, | |
| 543 | Trepes, Karen | Hammondsport, N | |
| 544 | Duncan, Michael | Buena Park, CA | |
| 545 | Taylor, Melissa | Valparaiso, IN | |
| 546 | Chartier, Michele | Warwick, RI | |
| 547 | Dale, Adrienne | Ann Arbor, MI | |
| 548 | Woods, James | Penn Valley, CA | |
| 549 | Blake, Seana | Ellensburg, WA | |
| 550 | Pederson, John | Nampa, ID | |
| 551 | Gannon, Michele | Mooresville, IN | |
| 552 | Manuel, Dave | Arlington, WA | |
| 553 | Duffy, Abigail | Quincy, MA | |
| 554 | Dolney, Rachel | Winter Park, FL | |
| 555 | Ledgerwood, Lynn | Olympia, WA | |
| 556 | Zajic, Daniel | North Haverhill, NH | |
| 557 | Hobbs, Melissa | Grand Ridge, FL | |
| 558 | Facette, Jim | Honolulu, TX | |
| 559 | Berglas, Silvia | Highland, CA | |
| 560 | Woomer, JoAnna | Tyrone, PA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------------------|--------------------|----------------------|
| 561 | Johnson, Carrie | Eustis, FL | |
| 562 | Brogan, Loretta | Shreveport, LA | |
| 563 | Cleland, C. | Miami, FL | |
| 564 | Wilson, Jerry | Finleyville, PA | |
| 565 | Gray, Carol | Bloomington, IN | |
| 566 | Hodapp, Natalie | Mankato, MN | |
| 567 | Sulanke, Thom | Bloomington, IN | |
| 568 | Christofus Blackstone, Deborah | Middlesboro, KY | |
| 569 | Maloney, Kristie | Antioch, CA | |
| 570 | Kosek, Kateri | Hopewell Jct, NY | |
| 571 | Enevoldsen, David | San Jose, CA | |
| 572 | Burch, David Paul Xavier | South Bend, IN | |
| 573 | Clemens, Kimberly | Shillington, PA | |
| 574 | Olsen, Scott | Jenks, OK | |
| 575 | Babst, Christina | West Hollywood, C | |
| 576 | Santerre, Roger | New Paltz, NY | |
| 577 | Herndon, Laura | Burbank, CA | |
| 578 | Allred, Frances | El Prado, NM | |
| 579 | Pan, Pinky Jain | Santa Rosa, CA | |
| 580 | Devine, Lauren | Boca Raton, FL | |
| 581 | Lemke, Melissa | Glens Falls, NY | |
| 582 | Wood, Margaret | Suffolk, VA | |
| 583 | Rodrigue, Jim | Gardiner, ME | |
| 584 | Maddox, Charles | Broadway, VA | |
| 585 | Burch, David Paul Xavier | South Bend, IN | |
| 586 | Koteles, Patty | Broadview Heights, | |
| 587 | Amato, Gwendoline | East Greenwich, RI | |
| 588 | Gilbert, Valerie | New York, NY | |
| 589 | Jones, Gloria | Hialeah, FL | |
| 590 | Bafik-Vehslage, Michelle | San Antonio, TX | |
| 591 | Bashen, Melinda | Alexandria, VA | |
| 592 | Souza, Michael | San Diego, CA | |
| 593 | Capotorto, Jeanette | Commack, NY | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---------------------|-------------------|----------------------|
| 594 | Lytle, Denise | Fords, NJ | |
| 595 | McClintock, Cathy | Tucson, AZ | |
| 596 | Turek, Gabriella | Pasadena, CA | |
| 597 | Wiley, Carol | Victorville, CA | |
| 598 | Welch, Joanna | Crescent City, CA | |
| 599 | Chalkley, Celena | Palm Coast, FL | |
| 600 | Swanson, Scott | Austin, TX | |
| 601 | Donnici, Anthony | Kansas City, MO | |
| 602 | Riolo, Marion | Crotone, | |
| 603 | Keefer, Nina | Longmont, CO | |
| 604 | Ashton, Ann | Baltimore, MD | |
| 605 | Wieland, Loren | Fort Myers, FL | |
| 606 | O'Sullivan, Joseph | Flushing, NY | |
| 607 | Acevedo, N. K. | Revere, MA | |
| 608 | Donnelly, Stephen | Easthampton, MA | |
| 609 | Simon, Philip | San Rafael, CA | |
| 610 | Modarelli, David | Akron, OH | |
| 611 | Lambrecht, Gretchen | Durango, CO | |
| 612 | Poulson, Judi | Fairmont, MN | |
| 613 | Dale, Adrienne | Ann Arbor, MI | |
| 614 | Giniewicz, Deborah | North Oxford, MA | |
| 615 | Vertrees, Gerald | Golden Valley, AZ | |
| 616 | Williams-West, | Mer Rouge, LA | |
| 617 | Ekman, Lea | Alexandria, VA | |
| 618 | Kirby, Alison | Wooster, OH | |
| 619 | Ferris, C. | Pollock Pines, CA | |
| 620 | Kennedy, Bill | Kearns, UT | |
| 621 | Zalewski, K. | Brighton, MI | |
| 622 | Ledgerwood, Lynn | Olympia, WA | |
| 623 | Gannon, Michele | Mooresville, IN | |
| 624 | Phillips, Janice | Kernersville, NC | |
| 625 | Haugen, Lisa | Kearney, MO | |
| 626 | Desbrow, Stacy | Newport Beach, C | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------|-------------------|----------------------|
| 627 | Riley, Kelly | Hummelstown, PA | |
| 628 | Thomson, Arran | Portland, OR | |
| 629 | Comeskey, John | Dayton, OH | |
| 630 | Sanders, David | Glendora, CA | |
| 631 | Colon, Jannice | Lake Hopatcong, N | |
| 632 | Cosgriff, Mark | Lakewood, OH | |
| 633 | Bettmann, Joanna | Torrey, UT | |
| 634 | Bauer, Kim | Lancaster, CA | |
| 635 | Curtis, Kevin L. | Fullerton, CA | |
| 636 | Bail, Joseph | Clearwater, FL | |
| 637 | Obuckley, Todd | Durham, NC | |
| 638 | Olsen, Scott | Jenks, OK | |
| 639 | Mason, Lorraine | Oxford, PA | |
| 640 | Dorstenia, Kaj | Copenhagen, | |
| 641 | Burns, Deborah | Dayton, OH | |
| 642 | Shadrick, Roxann | Decatur, IL | |
| 643 | Chaney, Trish | Colorado Springs, | |
| 644 | Patch, Frances | Takoma Park, MD | |
| 645 | Gibbs-Halm, Deborah | Grand Blanc, MI | |
| 646 | Leonard, Richard | New York, NY | |
| 647 | Brensinger, Elizabeth | New Tripoli, PA | |
| 648 | Anixter, Shelley | San Francisco, CA | |
| 649 | Spotts, Richard | Saint George, UT | |
| 650 | Galiati, Ronald J. | San Diego, CA | |
| 651 | Desbrow, Stacy | Newport Beach, C | |
| 652 | Johnson, Matt | Santa Monica, CA | |
| 653 | Ringe, Axel C. | New Market, TN | |
| 654 | Mihok, Michael | Bayville, NJ | |
| 655 | Fitch, James | Pittsburgh, PA | |
| 656 | Williams, Paul | Atlantic City, NJ | |
| 657 | Evans, Michael W. | Los Angeles, CA | |
| 658 | Wick, David | Jonesboro, AR | |
| 659 | Robinson, Tammy | Asheboro, NC | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|--------------------------|-------------------|----------------------|
| 660 | Anderson, Corina | Bakersfield, CA | |
| 661 | Jorgensen, James H. | Ames, IA | |
| 662 | Bluhm, Pamala | Culver City, CA | |
| 663 | Shook, Amy | Brookhaven, PA | |
| 664 | Burdin, Jared | Camano Island, W | |
| 665 | Hunrichs, Paul | Santee, CA | |
| 666 | Bond, Alyssa | Rockport, TX | |
| 667 | Wyer, D. | Horseheads, NY | |
| 668 | Sweel, Greg | Santa Monica, CA | |
| 669 | Butler, Darrol | Redding, CA | |
| 670 | Davis, William | Carmichael, CA | |
| 671 | Marks, Linda | Sunland, CA | |
| 672 | Singer, Barbara | Chicago, IL | |
| 673 | Davis, Laurie | Carmichael, CA | |
| 674 | Smith, Janice | Kingsville, TX | |
| 675 | Haugen, Lisa | Kearney, MO | |
| 676 | Wiley, Carol | Victorville, CA | |
| 677 | Smith, Stuart | Olympia, WA | |
| 678 | Gintz, Aimee | Dover, OH | |
| 679 | Urani, Thomas | San Francisco, CA | |
| 680 | Brown, Michael | Chattanooga, TN | |
| 681 | Walker, Elizabeth | Waverly, TN | |
| 682 | Thompson, Cheryl | Winthrop, ME | |
| 683 | Gregory, Branwen | Los Angeles, CA | |
| 684 | Gregory, Probyn | Los Angeles, CA | |
| 685 | Gaydon, Sandra | Defuniak Springs, | |
| 686 | Prosperie, Johnnie | Nacogdoches, TX | |
| 687 | Chalkley, Celena | Palm Coast, FL | |
| 688 | Bafik-Vehslage, Michelle | San Antonio, TX | |
| 689 | Colon, Jannice | Lake Hopatcong, N | |
| 690 | Shelton, Mary | Banner Elk, NC | |
| 691 | Becker, Karen | Ventura, CA | |
| 692 | Cosgriff, Mark | Lakewood, OH | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---------------------|-------------------|----------------------|
| 693 | Brooks, Pamela | Logan, OH | |
| 694 | Handwerker, Steven | Boca Raton, FL | |
| 695 | Lambrecht, Gretchen | Durango, CO | |
| 696 | Myers, Adele | Meadow Valley, CA | |
| 697 | Hert, Diane | Canton, OH | |
| 698 | Donnelly, Stephen | Easthampton, MA | |
| 699 | Wright, Heather | Houghton, MI | |
| 700 | McGinness, Doris | Des Plaines, IL | |
| 701 | Clark, Martina | Westhampton, NJ | |
| 702 | Kosek, Kateri | Hopewell Jct, NY | |
| 703 | Shohan, Doug | Lee, MA | |
| 704 | Bail, Joseph | Clearwater, FL | |
| 705 | Graziosa, Sara | East Canaan, CT | |
| 706 | Manuel, Dave | Arlington, WA | |
| 707 | Gutkowski, Marie | Ridgewood, NY | |
| 708 | Daniels, J. Scott | Houston, TX | |
| 709 | Brown, Michael | Chattanooga, TN | |
| 710 | Sweel, Greg | Santa Monica, CA | |
| 711 | Evans, Michael W. | Los Angeles, CA | |
| 712 | Hermann, Richard | Durham, NC | |
| 713 | Mikalson, Claire | Pullman, WA | |
| 714 | Mohn, Cynthia | Campbell, OH | |
| 715 | Horn, Lenora | AZ | |
| 716 | Tribble, David | Lees Summit, MO | |
| 717 | Clift, Philip A. | Fulton, NY | |
| 718 | Spotts, Richard | Saint George, UT | |
| 719 | Dunkleberger, David | Doylestown, PA | |
| 720 | Anderson, Corina | Bakersfield, CA | |
| 721 | Heinold, Christian | Oakland, CA | |
| 722 | Lien, David | Colorado Springs, | |
| 723 | Oberg, Pamela | Somersworth, NH | |
| 724 | Russell, Laura | Tampa, FL | |
| 725 | Fogleman, Maxwell | Prescott, AZ | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|---------------------|---------------------|----------------------|
| 726 | Wold, Amy | Rochester, MN | |
| 727 | Martin, Diane | Scottsdale, AZ | |
| 728 | Gols, L. | Natick, MA | |
| 729 | Burack, Debbie | New York, NY | |
| 730 | Strader, Dow | Austin, TX | |
| 731 | Marks, Linda | Sunland, CA | |
| 732 | Loria, Steven | Garrison, NY | |
| 733 | Voorhies, Bill | West Tremont, ME | |
| 734 | Rehn, Debra | Portland, OR | |
| 735 | Fitch, James | Pittsburgh, PA | |
| 736 | Jorgensen, James H. | Ames, IA | |
| 737 | Jud, Daniel | Eugene, OR | |
| 738 | Bluhm, Pamala | Culver City, CA | |
| 739 | Wendt, Diana | Oakland, CA | |
| 740 | Yates, Joan | Scarborough, ME | |
| 741 | Pavitt, Bridget | London, UK | |
| 742 | Jones, David H. | Seattle, WA | |
| 743 | Maloney, Kristie | Antioch, CA | |
| 744 | Prosperie, Johnnie | Nacogdoches, TX | |
| 745 | Phillips, Patricia | Kent, OH | |
| 746 | Chisholm, Holly | Oxford, MI | |
| 747 | Buehl, Barbara | Eden Prairie, MN | |
| 748 | Ledden, Dennis | Rancho Murieta, C | |
| 749 | Zajic, Daniel | North Haverhill, NH | |
| 750 | Becker, Karen | Ventura, CA | |
| 751 | Benge, Regina K. | Brodhead, KY | |
| 752 | Chartier, Michele | Warwick, RI | |
| 753 | Joranko, Roberta | Columbus, OH | |
| 754 | Dolney, Rachel | Winter Park, FL | |
| 755 | Benenati, Scott | Westminster, CO | |
| 756 | Chesnutt, Judy | Brooklyn, NY | |
| 757 | Romans, Jennifer | Lake Forest, IL | |
| 758 | Hughes, Brendan | Ridgecrest, CA | |

| <u>Submission #</u> | <u>Person:</u> | <u>Location:</u> | <u>Organization:</u> |
|---------------------|-----------------------------|--------------------|----------------------|
| 759 | Chinni, Adrienne | Cleveland Heights, | |
| 760 | Ramos, Miguel | Bellingham, WA | |
| 761 | Bauer, Kim | Lancaster, CA | |
| 762 | Bonilla-Jones, Carmen | Venice, FL | |
| 763 | Huggins, William | Las Vegas, NV | |
| 764 | Camara, Tom | Mill Valley, CA | |
| 765 | Brenner, Jared | New York, NY | |
| 766 | Guthrie, Barbara | Shoreline, WA | |
| 767 | Vesely, Sak | Oakland, CA | |
| 768 | Ferguson, Joanne | Sheffield Lake, OH | |
| 769 | Woerpel, D.V.M., Richard W. | Simi Valley, CA | |
| 770 | Martin-Brodak, Diane | Holly, MI | |
| 771 | Brooks, Pamela | Logan, OH | |
| 772 | Brooks, Bo | Logan, OH | |
| 773 | Hedges, Buddy | Logan, OH | |
| 774 | Brooks, Winnie | Logan, OH | |
| 775 | Hedges, Christopher | Logan, OH | |
| 776 | Frank, Harriette | Durham, NC | |
| 777 | Zimny, Gloria | Richmond, MI | |
| 778 | Rosenkrantz, Stewart | Pompano Beach, F | |
| 779 | Wasman, Donna | Sevierville, TN | |
| 780 | Gintz, Aimee | Dover, OH | |
| 781 | Shukla, H. | Concord, CA | |
| 782 | Woomer, JoAnna | Tyrone, PA | |
| 783 | Thornley, Emily | Oregon City, OR | |
| 784 | Berman, Nancy | Berkeley, CA | |
| 785 | Kelly, Wayne | Ashland, OR | |
| 786 | Thompson, Cheryl | Winthrop, ME | |

CHAPTER 7:

REFERENCES



7.0 REFERENCES

- (1872). General Mining Law of 1872. United States Code. 30 U.S.C. 21.
- (1906). Native Allotment Act of 1906. United States Code. 43 U.S.C 270-1 to 270-3.
- (1920). Mineral Leasing Act of 1920. United States Code. 43 U.S.C. 185.
- (1946). Reorganization Plan No. 3 of 1946. Federal Register. 11 F.R. 7875.
- (1947). Minerals Leasing Act for Acquired Lands. United States Code. 30 U.S.C. 351-360.
- (1953). Submerged Lands Act of 1953. United States Code. 43 U.S.C. 1301.
- (1954). Recreation and Public Purposes Act. United States Code. 869 43 U.S.C. 869.
- (1959). Alaska Statehood Act. 72 Stat. 339.
- (1964). Wilderness Act. United States Code. 16 U.S.C. 1131-1136.
- (1966). National Historic Preservation Act of 1966. United States Code. 16 U.S.C. 470 *et seq.*
- (1968). National Trails System Act. United States Code. 16 U.S.C. 1241 *et. seq.*
- (1968). Wild and Scenic Rivers Act, as amended. United States Code. 16 U.S.C. 1271-87, *et seq.*
- (1969). National Environmental Policy Act of 1969. United States Code. 42 U.S.C. 4321-4347.
- (1971). The Alaska Native Claims Settlement Act. United States Code. 43 U.S.C. 1601.
- (1973). The Endangered Species Act of 1973. United States Code. 16 U.S.C. 1531-1544.
- (1973). Prevention, Control, and Abatement of Environmental Pollution at Federal Facilities. Executive Order. E.O. 11752.
- (1974). Federal Noxious Weed Act of 1974. United States Code. 7 U.S.C. 2801-2814.
- (1976). Federal Coal Leasing Amendment Act of 1976. United States Code. 30 U.S.C. 201.
- (1976). Federal Land Policy and Management Act. United States Code. 43 U.S.C. 1701 *et seq.*
- (1976). National Forest Management Act of 1976. United States Code. 16 U.S.C. 1600-1614.
- (1976). Taylor Grazing Act. United States Code. 43 U.S.C. 315-316.
- (1977). Floodplain Management. Executive Order. E.O. 11988.
- (1977). Soil and Water Resources Conservation Act of 1977. United States Code. 16 U.S.C. 2001-2009.
- (1977). Surface Mining Control and Reclamation Act of 1977. United States Code. 30 U.S.C. 1240(a).

- (1978). The Alaska Forest Resources and Practices Act (FRPA). AS. 41.17: Division of Forestry web site, Forest Practices, Alaska Forest Resources and Practices Act.
- (1978). Municipal Entitlement Act. Alaska Statute. AS 29.65.
- (1980). Alaska National Interest Lands Conservation Act. United States Code. 16 U.S.C. 410hh-3233, 43 U.S.C. 1602-1784.
- (1981). Farmland Protections Policy Act of 1981. United States Code. 7 U.S.C. 4201-4209.
- (1984). Farmland Protection Policy Act. CFR 7 Section 658. 7.
- (1987). Coastal Management. City and Borough of Juneau 9. 49: 70.900-70.960.
- (1994). Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Executive Order.
- (1996). Telecommunications Act of 1996. United States Code. 47 U.S.C 151.
- (1998). Authority Relating to Land Acquisition. United States Code. 10 U.S.C. 2676.
- (1998). Removing Grazing Regulations in Alaska. 43 CFR 4200.
- (2002). Clean Water Act. United States Code. 33 U.S.C. 1251: 101-607.
- (2004). Alaska Land Transfer Acceleration Act.
- (2004). Conditions for Generally Allowed Uses. Alaska Administrative Code. 11 AAC 96.025.
- (2004). Restrictions on Water Resources Projects. 1278.
- and E. McClaren (2003). Queen Charlotte Goshawk: Status, Distribution, and Population Trends. Bird Trends: A Report on Results of National Ornithological Surveys in Canada, Canadian Wildlife Service, Migratory Birds Conservation.
- Abeyta, A. (2003). Reducing Wildfire Threat in Anchorage Through GIS. Directions Magazine.
- ABS Alaska (2005). Alternative Energy & Remote Power Products, Alaska's Natural Power Company. Renton, WA. 2005.
- Adams, M. J. (2004). Annual Report, USGS Forest & Rangeland Ecosystem Science Center (FRESC), Pacific Northwest and Adjacent Aridlands Region.
- Adamus, P. R. and L. T. Stockwell (1983). A Method for Wetland Functional Assessment, Volume 1: Critical Review and Evaluation Concepts. Washington D.C., Offices of Research, Development and Technology, Federal Highway Administration, U.S. Department of Transportation.
- Adamus Resources Assessment Inc. (1987). Juneau Wetlands Functions and Values, Report Prepared for the City and Borough of Juneau, Alaska.
- ADEC (2001a). Alaska Regional Haze Strategy. Juneau, AK, ADEC Air Non-point and Mobile Sources: 44.

- ADEC (2001b). 1999 Air Toxics Emission Inventory – Final Report for Anchorage, Fairbanks, and Juneau, Alaska, Hoefler Consulting Group, Sierra Research, and Green Engineering.
- ADEC (2003). 14 AAC 70 Water Quality Standards. Alaska Administrative Code. 18 AAC 70.
- ADEC (2004). 1999 Air Toxics Emission Inventory Information as Retrieved January 20, 2004. <http://www.state.ak.us/dec/dawq/agi/anpms/Main%20Pages/toxics/eipage.htm>. January 20.
- ADEC (2005). State of Alaska Contaminated Sites Database. 2005.
- ADF&G (1978). Alaska Fisheries Atlas. Volume I., Print Northwest, Tacoma WA.
- ADF&G (1983). Life Histories and Requirements of Fish and Wildlife. Alaska Habitat Management Guide, Southcentral Region. Juneau, AK, ADF&G Habitat Division. Volume I: 429.
- ADF&G (1985a). Alaska Habitat Management Guide. Southcentral Region Volume II: Distribution, Abundance, and Human Use of Fish and Wildlife. Juneau, AK.
- ADF&G (1985b). Alaska Habitat Management Guide. Southwest Region Volume I: Fish and Wildlife Life Histories, Habitat Requirements, Distribution, and Abundance. Juneau, AK.
- ADF&G (1985c). Alaska Habitat Management Guides. Southeastern Region Volume III: Distribution, Abundance, and Human of Fish and Wildlife. Juneau, AK, ADF&G, Habitat Division.
- ADF&G (1988). Susitna Flats State Game Refuge Management Plan.
- ADF&G (1990). Mendenhall Wetlands State Game Refuge Management Plan. Juneau, AK, ADF&G.
- ADF&G (1991a). Catalog of the Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes. Juneau, AK, Habitat Division.
- ADF&G (1991b). Anchorage Coastal Wildlife Refuge Management Plan. Anchorage, AK, Divisions of Habitat and Wildlife Conservation: 97.
- ADF&G (1993). Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan. Anchorage, AK, ADF&G, Divisions of Habitat and Restoration and Wildlife Conservation: 124.
- ADF&G (1994a). Tugidak Island Critical Habitat Area Management Plan, Public Review Draft. Anchorage, AK, ADF&G Divisions of Habitat and Restoration and Wildlife Conservation: 41.
- ADF&G (1996). McNeil River State Game Refuge and State Game Sanctuary Management Plan. Anchorage, AK, Divisions of Habitat and Restoration and Wildlife Conservation: 71.
- ADF&G (1999). Southeast Alaska Elk Management Plan, Draft. Juneau, AK, ADF&G Division of Wildlife Conservation: 9.

- ADF&G (2000a). Project Summaries: Fox River Flats Grazing Exclusion Study, ADF&G, USDA, NRCS. 2004.
- ADF&G (2000b). Subsistence in Alaska: A Year 2000 Update. Juneau, AK, ADF&G, Division of Subsistence.
- ADF&G (2001a). Caribou Management Report July 1, 1998 through June 30, 2000. C. Healy.
- ADF&G (2001b). Community Profile Database. Juneau, AK, ADF&G, Division of Subsistence.
- ADF&G (2002a). Kodiak Archipelago Bear Conservation and Management Plan. Anchorage, Alaska, State of Alaska, Department of Fish and Game, Division of Wildlife Conservation, Developed for the Kodiak archipelago by the Citizens Advisory Committee: 222.
- ADF&G (2002b). Palmer Hay Flats State Game Refuge Revised Management Plan. Palmer, AK, ADF&G, Division of Wildlife Conservation: 64.
- ADF&G (2003). State of Alaska Refuges, Critical Habitat Areas and Sanctuaries. 2005.
- ADF&G (2004a). Fish & Game, ADF&G. 2004.
- ADF&G (2004b). Wildlife Notebook Series, ADF&G. 2004.
- ADF&G (2004c). Wildlife Conservation, ADF&G. 2005.
- ADF&G (2004d). Fish Distribution Database, Sport Fish Division.
- ADF&G (2004e). Sport Fish Division, Watersheds and Fish website, "It Takes a Healthy Watershed". 2004.
- ADF&G (2004f). Fire Ecology in Alaska. Anchorage, AK, ADF&G Division of Wildlife Conservation. 2005.
- ADF&G (2005a). Northern Cook Inlet Special Management Fisheries. Sport Fish Division website. 2005.
- ADF&G (2005b). Southcentral Alaska Sport Fishing Brochures. Kenai. Recreational Fishing in the Kenai River. 2005.
- ADF&G (2005c). Sport Fish Division - Southeast Alaska. Haines-Skagway Management Area.
- ADF&G, NMFS, et al. (1998). Essential Fish Habitat Assessment Report for the Salmon Fisheries in the EEZ off the Coast of Alaska. Anchorage, AK.
- ADNR (1986). Hatcher Pass Management Plan Final. Anchorage, AK, Prepared by ADNR Division of Land and Water Management, Southcentral Regional Office in cooperation with ADF&G, ADOT&PF, and MSB.
- ADNR (1989). Deception Creek Land Use Plan.
- ADNR (1990). Bristol Bay Easement Atlas. Anchorage, AK, ADNR Division of Land & Water: 240.

- ADNR (1991). Sustina Basin Recreation Rivers Management Plan. Anchorage, AK, ADNR Division of Land, Land & Resources Section.
- ADNR (1993a). Estimated Mineral Potential of Lands Available for State Selection 1991-1993, DGGS: 181.
- ADNR (1993b). Kenai Easement Atlas. Soldotna, AK, ADNR, Division of Land: 15.
- ADNR (1993c). Juneau State Land Plan. Juneau, AK, ADNR Division of Land, Resource Assessment & Development.
- ADNR (1994). Turnagain Arm Management Plan for State Lands, ADNR.
- ADNR (1997a). Kenai River Comprehensive Management Plan, ADNR Division of Land, Division of Parks & Outdoor Recreation, In Conjunction with ADF&G Habitat & Restoration Division and Kenai Peninsula Borough: 130.
- ADNR (1997b). Kodiak Island Public Access Atlas. Kodiak, AK, ANDR Division of Land.
- ADNR (1997c). Prince William Sound Public Access Atlas: Including a Supplement to the Kenai Easement Atlas. Anchorage, AK, ADNR, Division of Land: 16.
- ADNR (1997d). Caines Head State Recreation Area Management Plan, ADNR Division of Parks & Outdoor Recreation, Kenai/Prince William Sound Area Parks Office: 48.
- ADNR (1999). Alaska's Outdoor Legacy: Statewide Comprehensive Outdoor Recreation Plan, 1997-2002. Anchorage, AK, ADNR Division of Parks & Outdoor Recreation.
- ADNR (2000a). Central/Southern Southeast Area Plan. Anchorage, Alaska, ADNR, Division of Mining, Land & Water, Resource Assessment & Development Section: 328.
- ADNR (2000b). Alaska Recreational Trails Plan. Anchorage, AK, ADNR Division of Parks & Outdoor Recreation: 101.
- ADNR (2001a). Kenai Area Plan. Anchorage, Alaska, ADNR, Division of Mining, Land & Water, Resource Assessment & Development Section.
- ADNR (2001b). Northern Southeast Area Plan, Public Review Draft, ADNR Division of Mining, Land & Water, Resource Assessment & Development Section.
- ADNR (2001c). Ninilchik/Deep Creek State Recreation Areas Management Plan. Soldotna, AK, ADNR, Division of Parks and Outdoor Recreation: 18.
- ADNR (2002a). Five-Year Schedule of Timber Sales: 2003 through 2007. Soldotna, AK, Division of Forestry Kenai-Kodiak Area.
- ADNR (2002b). Chilkat Bald Eagle Preserve Management Plan, ADNR Division of Mining, Land & Water, Resource Assessment & Development Section, and Division of Parks & Outdoor Recreation: 176.
- ADNR (2002c). Haines State Forest Management Plan, ADNR Division of Mining, Land & Water, Resource Assessment & Development Section, and Division of Forestry: 212.

- ADNR (2003a). Public Review Draft Kodiak Area Plan for State Lands. Anchorage, Alaska, ADNR, Division of Mining, Land & Water, Resource Assessment & Development Section: 271.
- ADNR (2003b). Five-Year Management Schedule: January 1, 2004 through December 31, 2008. Haines, AK, Division of Forestry Coastal Region, Northern Southeast Area Haines State Forest.
- ADNR (2003c). Chapter 2 - Area Wide Land Management Policies. Kodiak Area Plan-Public Review Draft.
- ADNR (2003d). Cook Inlet Activity & Discoveries January 2003, Division of Oil & Gas.
- ADNR (2003e). Special Use Land Designation for Commercial Helicopter Operations within the Haines State Forest and Surrounding General State Land and as Further Described in the Haines State Forest Management Plan and Northern Southeast Area Plan, ADNR Division of Mining, Land, and Water: 10.
- ADNR (2003f). Kodiak Area Plan for State Lands Public Review Draft. Anchorage, AK, ADNR, Division of Mining, Land & Water Resource Assessment & Development Section: 271.
- ADNR (2004a). Public Review Draft Forest Land Use Plan and Preliminary Decision for the Tin Timber Sale SC-1502 ADL 227108 Coastal Region Mat/Su Southwest Area Mat/Su District.
- ADNR (2004b). Alaska Forest Resources & Practices Regions Map, Division of Forestry.
- ADNR (2004c). Division of Parks and Outdoor Recreation, Alaska State Parks, ADNR. 2004.
- ADNR (2004d). Goldbelt, Inc. Proposed Tideland Lease ADL 107152 Finding and Decision AS 38.05.035(e). Juneau, AK, ADNR Division of Mining, Land & Water.
- ADNR (2004e). Alaska Chilkat Bald Eagle Preserve. Anchorage, AK, ADNR Division of Parks and Outdoor Recreation. 2005.
- ADNR (2005a). Haines State Forest, ADNR Division of Forestry. 2005: Homepage.
- ADNR (2005b). Five-Year Schedule of Timber Sales: Calendar Years 2005 through 2009. Ketchikan, AK, Division of Forestry Coastal Region Southern Southeast Area.
- ADNR (2005c). Alaska Forest Health Protection Program. 2005.
- ADNR (2005d). Kensington Gold Project, ADNR Division of Mining, Land & Water. 2005.
- ADNR (2005e). Division of Forestry Home Page. 2005.
- ADNR (2005f). Preliminary Best Interest Finding to Lease 40 Acres of the Wishbone Hill Coal Field near Sutton, Alaska, Prepared by the ADNR Division of Mining, Land, and Water: 14.
- ADNR (2005g). Five-Year Oil and Gas Leasing Program. Anchorage, AK, ADNR Division of Oil and Gas: 61.
- ADNR (2005h). Coalbed Methane Study. Anchorage, AK, ADNR DGGS. 2005.

- ADNR (2005i). Sale Announcement: Cook Inlet Areawide 2005 Competitive Oil and Gas Lease Sale. Anchorage, AK, ADNR Division of Oil and Gas.
- ADNR (2005j). Alaska Oil and Gas Activities. M. D. Myers, ADNR Division of Oil and Gas, Presentation to The House Special Committee on Oil and Gas.
- ADNR (2005k). Alaska Peninsula Areawide Preliminary Best Interest Finding of the Director and Alaska Coastal Management Program Consistency Analysis. Anchorage, AK, ADNR Division of Oil and Gas.
- ADNR (2005l). Draft Forest Land Use Plan/Preliminary Decision & ACMP Consistency Review.
- ADNR (2005m). Alaska Heritage Resource Survey. Anchorage, AK, DB on file at Office of History and Archaeology.
- ADNR and ADF&G (1986). Matanuska Valley Moose Range Management Plan. Anchorage, AK, In cooperation with MSB and ADOT&PF.
- ADNR and ADF&G (1988). Prince William Sound Area Plan for State Lands. Anchorage, AK: 423.
- ADNR and ADF&G (1993). Amendment to the Susitna Area Plan. Anchorage, AK, ADNR Division of Mining, Land & Water: 4.
- ADNR, ADF&G, et al. (1984). Bristol Bay Area Plan for State Lands. Anchorage, Alaska, ADNR, ADF&G, and ADEC: 248.
- ADNR, ADF&G, et al. (1985). Susitna Area Plan. Anchorage, AK, ADNR Division of Mining, Land & Water.
- ADNR, ADF&G, et al. (1991). Kashwitna Management Plan. Anchorage, AK, ADNR Division of Land, Land & Resources Section.
- ADNR and MSB (1984). Fish Creek Management Plan.
- ADNR, MSB, et al. (1982). Willow Sub-Basin Area Plan: A Land Use Plan for Public Lands, With the assistance of Soil Conservation Service and USDA.
- ADNR/DOG (2003). "Annual Report."
<http://www.dog.dnr.state.ak.us/oil/products/publications/annual/report.htm>: 108 pp.
- ADNR/DOG (2004). "AK94CMB#1 Desorption Data."
http://www.dog.dnr.state.ak.us/oil/products/publications/coal_meth/mat-su/test_data/test_data.htm.
- ADOT&PF (1999). Southeast Alaska Transportation Plan. Juneau, AK, ADOT&PF Division of Statewide Planning: 110.
- ADOT&PF (2001). Prince William Sound Area Transportation Plan: An Element of the Statewide Transportation Plan, Final Edition. Juneau, AK, Prepared by Parsons Brinckerhoff.
- ADOT&PF (2002). Southwest Alaska Transportation Plan, Final Edition: An Approved Component of the Alaska Statewide Transportation Plan. Juneau, AK, Prepared by Parsons Brinckerhoff: 103.

- ADOT&PF (2003). Abbott Loop Extension Home Page. Anchorage, AK, DOWL Engineers. 2005.
- ADOT&PF (2004a). Seward Highway All American Road (Alaska Scenic Byways), DOT&PF. 2004.
- ADOT&PF (2004b). Industrial Roads Program: Other IRP Project Not Yet in Design or Construction. 2005.
- ADOT&PF (2004c). Chignik Connectors Project Home Page: Exploring, Defining, and Understanding the Implications of a Road Linking the Chigniks. Anchorage, AK, HDR Alaska, Inc. 2005.
- ADOT&PF (2004d). Sterling Highway Mile Post 45 to 60 Alaska. Anchorage, AK, HDR Alaska, Inc. 2005.
- ADOT&PF (2004e). Best Solution for Mid-Town Congestions: Why Don't We Just Drive Around Lake Otis and Tudor?, DOT&PF Press Box. 2005.
- ADOT&PF (2004f). Draft for Public Review Southwest Alaska Transportation Plan Revision Technical Memorandum Revised Cost and Effectiveness Measures. Anchorage, AK, Prepared by PB Consult Inc.
- ADOT&PF (2004g). Naknek Crossing Intermodal Economic and Airport Use Study Draft. Anchorage, AK, Prepared by Northern Economics: 68.
- ADOT&PF (2004h). Southeast Alaska Transportation Plan, Draft Update for Public Review. Juneau, AK, ADOT&PF Southeast Planning: 119.
- ADOT&PF (2005a). Juneau Access Improvements Supplemental Draft Environmental Impact Statement. Juneau, AK, FWHA: 490.
- ADOT&PF (2005b). Gravina Access Project: A Gateway to the Future, ADOT&PF. 2005.
- ADOT&PF (2005c). Juneau Second Channel Crossing, ADOT&PF. 2005.
- ADOT&PF (2005d). New Waves: MV Chenega. Juneau, AK, AMHS. 2005.
- ADOT&PF (2005e). Mid-Region Access EIS - Highway Access to the Continental Highway System (Bradfield Road). Juneau, AK. 2005.
- ADOT&PF (2005f). Northern Panhandle Transportation Study. Juneau, AK. 2005.
- ADOT&PF (2005g). Sitka Access. Sitka, AK. 2005.
- ADOT&PF (2005h). South Mitkof Island Ferry Terminal Project. 2005.
- ADOT&PF and Federal Aviation Administration (2004). Haines Airport Master Plan Draft Report. Juneau, AK, Prepared by DOWL Engineers: 101.
- ADOT&PF and FHWA (2004). Gravina Access Project Final Environmental Impact Statement. Juneau, AK.
- ADOT&PF and MOA (2003). East Anchorage Study of Transportation: Study Overview and Recommendations. Anchorage, AK, Prepared by HDR Alaska, Inc.: 25.

- ADOT&PF, MOA, et al. (2004a). South Extension of the Coastal Trail Draft Environmental Impact Statement. Anchorage, AK, Prepared by HDR Alaska, Inc.
- ADOT&PF, MOA, et al. (2004b). South Coastal Trail: Welcome to the South Extension of the Coastal Trail Project Web Site. Anchorage, AK, Prepared by HDR Alaska, Inc. 2005.
- Alaska Board of Forestry (2005). Forest Management in Alaska. World's Boreal Forests. 2005: web page.
- Alaska Center for the Environment, Alaska Coalition, et al. (2004). Nomination to Designate Ecologically Significant Lands Administered by the BLM in the Ring Of Fire Planning Area as Areas of Critical Environmental Concern. B. A. F. Office. Anchorage, AK: Available by request from the BLM Anchorage Field Office.
- Alaska Department of Labor & Workforce Development (2005). Home Page, State of Alaska. 2005.
- Alaska Digest (2004). Special Designation Could Stop Creek Parties. Juneau Empire State News online. Juneau.
- Alaska Energy Authority (2005). Wind Energy Resource Assessment Program, Alaska Energy Authority.
- Alaska Federation of Natives (2002). Subsistence. Anchorage, AK. 2005.
- Alaska Forest Association Inc. (2003). Alaska Forest Facts, Alaska Forest Associations Inc. 2004.
- Alaska Minerals Commission (2005). Report of the 2005 Alaska Minerals Commission. Anchorage, AK, ADNRR, Commerce, Community, and Economic Development.
- Alaska Power Association (2005). Alaska's Energy Systems, Alaska Power Association. 2005.
- Alaska Regional Response Team (2005). Subarea Contingency Plans (SCPs), Cook Inlet. 2005.
- Alaska Shorebird Working Group (2000). A Conservation Plan for Alaska Shorebirds. Anchorage, AK, USFWS Migratory Bird Management.
- Alaska State Fair (2005). 2004 Alaska State Fair. 2005.
- Alaska.com (2005). Alaska: Agriculture and Forestry. 2005.
- Alaska.com and Anchorage Daily News (2004). Southeast Alaska is Warm and Rainy, Alaska.com & Anchorage Daily News. 2004.
- Alaska.com (2000). Born of Ice: The Chugach National Forest.
- Alaskool (1998-2002). Alaska Regional Profiles, Institute of Social and Economic Research, UAA. 2004.
- Aleutians East Coastal Resource Service Area (1984). Resource Inventory for the Aleutians East Coastal Resource Service Area, Alaska Coastal Management Program.
- ALL Consulting and Montana Board of Oil and Gas Conservation (2004). "CBM Primer 2004."

- Altieri, M. A. (2001). The Ecological Impacts of Agriculture Biotechnology, ActionBioscience.org. 2005.
- American Ornithologists' Union (2004). "45th Supplement to the AOU Checklist of North American Birds." Auk 121: 985-995.
- Ames, K. M. and H. D. G. Maschner (1999). Peoples of the Northwest Coast: Their Archaeology and Prehistory. New York City, NY, Thames and Hudson.
- Ames, K. M. and H. D. G. Maschner (2000). Peoples of the Northwest Coast: Their Archaeology and Prehistory. London and New York, Thames and Hudson.
- Amundsen, C. C. and E. E. C. Clebsch (1971). "Dynamics of the Terrestrial Ecosystem Vegetation of Amchitka Island, Alaska." BioScience 21: 619-623.
- Angliss, R. P., D. P. DeMaster, et al. (2001). Alaska Marine Mammal Stock Assessments, 2001, USDOC: 203.
- Angliss, R. P. and K. L. Lodge (2002). Alaska Marine Mammal Stock Assessments, 2002, USDOC, NOAA, NMFS, Alaska Fisheries Science Center: 230.
- Angliss, R. P. and K. L. Lodge (2004). Alaska Marine Mammal Stock Assessments, 2003, USDOC: 230.
- ANHP (2001). Expected Species Lists for Alaska's National Parks. Anchorage, AK, University of Alaska.
- ANHP (2004). Weed Ranking Project. Anchorage, AK, ANHP, USFS State and Private Forestry, NPS Alaska Support Office, USDA Agricultural Research Service, UAF Cooperative Extension Service, USGS Alaska Biological Science Center. 2004.
- Arctic Climate Impact Assessment (2004). Impacts of a Warming Arctic: Arctic Climate Impact Assessment, Cambridge University Press.
- Armstrong, R. H. (1977). Weather and Climate. The environment of Amchitka Island, Alaska. M. L. Merritt and R. G. Fuller. Springfield, VA, Technical Information Center, Energy Research and Development Administration.
- Armstrong, R. H. (1995). Guide to the Birds of Alaska. Anchorage, AK, Alaska Northwest Publishing Co.
- Arnold, C. and J. Gibbons (1994). Impacts of Development on Waterways. NEMO Program Fact Sheet 3. Haddam, CT, Nonpoint Education for Municipal Officials (NEMO), University of Connecticut. 2005.
- ASTM International (1999). Standard Guide for Assessment of Wetland Functions Designation. Conshohocken, PA, ASTM International.
- AVO (2004a). Volcano Atlas. 2004.
- AVO (2004b). Volcano Hazard Reports. 2004.
- AWFCG (1998). Alaska Interagency Wildland Fire Management Plan. A. W. F. C. Group: 67.

- Ayyad, M. A. (2003). "Case Studies in the Conservation of Biodiversity: Degradation and Threats." Journal of Arid Environments 54: 165-182.
- Baichtal, J. F. and D. N. Swanson (1996). Karst Landscapes and Associated Resources: A Resource Assessment. General Technical Report PNW-GTR-383. USFS Pacific Northwest Research Station. Portland, OR.
- Bailey, E. A., D.B. Smith, et al. (1999). "National Geochemical Database: U.S. Geological Survey RASS (Rock Analysis Storage System) Geochemical Data for Alaska, Open File Report 99-433, Version 1.0." <http://geopubs.wr.usgs.gov/open-file/of99-433/>.
- Bailey, E. P. (1976). "Breeding Bird Distribution and Abundance in the Barren Islands, Alaska." Murrelet 57: 2-12.
- Bailey, E. P. (1993). Introduction of Foxes to Alaskan Islands--History, Effects on Avifauna, and Eradication, USFWS: 53.
- Bailey, R. G. (1995). Descriptions of the Ecoregions of the United States, 2nd Edition. Washington, D.C., USDA, USFS: 108.
- Bane, G. R. (2001). Shredded Wildlands: All-terrain Vehicle Management in Alaska, Sierra Club: 77.
- Barnes Jr., V. G., R. B. Smith, et al. (1995). Kodiak Brown Bears. Our Living Resources: A Report on the Distribution, Abundance, and Health of U.S. Plants, Animals, and Ecosystems. E. T. LaRoe, G. S. Farris, C. E. Puckett, P. D. Doran and M. J. Mac. Washington, D.C., USDO, National Biological Service. 2005.
- Barr, J. F., C. Eberl, et al. (2000). Red-throated Loon (*Gavia stellata*). The Birds of North America, No. 513. A. Poole and F. Gill. Philadelphia, PA, The Birds of North America, Inc.
- Beeman, W. R., R. C. Obuch, et al., Eds. (1996). Digital Map Data, Text, and Graphical Images in Support of the 1995 National Assessment of United States Oil and Gas Resources: USGS Digital Data Series DDS-35. one CD-ROM.
- Beget, J. E., C. J. Nye, et al. (2000). Preliminary Volcano-hazard Assessment for Makushin Volcano, ADNR DGGS.
- Beikman, H. M. (1980). Geologic Map of Alaska, USGS Special Map: 2 sheets.
- Belsky, A. J. and D. M. Blumenthal (1997). "Effects of Livestock Grazing on Stand Dynamics and Soils in Upland Forests of the Interior West." Conservation Biology 11(3).
- Berg, E. E. (2000). Studies in the Wilderness Areas of the Kenai National Wildlife Refuge: Fire, Bark Beetles, Human Development, and Climate Change. Wilderness Science in a Time of Change Conference, Missoula, MT, USDA, USFS, Rocky Mountain Research Station, Ogden, UT.
- Berrie, P., J. Ernest, et al. (1994). Lynx. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Betts, M. F. (1994). The Subsistence Hooligan Fishery of the Chilkat and Chilkoot Rivers. Juneau, AK, ADF&G, Division of Subsistence.

- Bickham, J. W., J. C. Patton, et al. (1996). "High Variability for Control-Region Sequences in a Marine Mammal: Implications for Conservation and Biogeography of Steller Sea Lions (*Eumetopias Jubatus*)."
Journal of Mammalogy 7: 95-108.
- Big Lake Citizens Advisory Committee, USKH, et al. (1998 [as amended]). Big Lake Management Plan.
- Bittenbender, P. E., J. C. Still, et al. (1999). Mineral Resources of the Chicagof and Baranof Islands Area, Southeast Alaska: 222, 3 plates.
- Black, L. T. (2004). Russians in Alaska, 1732-1867. Fairbanks, AK, University of Alaska Press.
- Black, L. T., S. McGowan, et al. (1999). The History and Ethnohistory of the Aleutians East Borough. Fairbanks, AK, The Limestone Press.
- Blackman, M. (1990). Haida: Traditional Culture. Handbook of North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 7: Northwest Coast: 240-260.
- Blair, M. and J. Schlapfer (2003). Ring-of-Fire Resource Management Plan: Wild & Scenic River Eligibility Determination. Anchorage, BLM Anchorage Field Office: 14.
- BLM (1980). Southcentral Management Framework Plan. Glennallen, AK, Glennallen District.
- BLM (1981). BLM Manual 8320, Planning for Recreation Resources. Washington, D.C., USDOl.
- BLM (1984). Manual H-8410-1: Visual Resource Inventory. Washington, D.C., USDOl, BLM.
- BLM (1985). BLM Manual 3031 - Energy and Mineral Resource Assessment.
- BLM (1986). BLM Manual 1624 - Supplemental Program Guidance for Energy and Mineral Resources. USDOl, BLM.
- BLM (1988a). Memorandum of Understanding between the BLM Alaska Region, NPS Alaska Region, and USFWS, Region 7. 2004.
- BLM (1988b). A Management Plan for Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility. Anchorage, AK, BLM Anchorage Field Office.
- BLM (1990a). Planning for Fluid Mineral Resources, BLM Handbook H-1624-1.
- BLM (1990b). Memorandum of Understanding between BLM, Alaska and USFS, Region 10 (re: 17(b) easements).
- BLM (1992). BLM Manual 8351 - Wild and Scenic Rivers Policy and Program Direction.
- BLM (1996a). BLM-Alaska Weed Management Plan, USDOl, BLM. 2004.
- BLM (1996b). Management of Anadromous Fish Habitat on Public Lands Including Sustainable Management Concepts, and Status and Trends in Alaska, Coastal and Columbia Regions., USDOl BLM Anadromous Salmonid Team.
- BLM (1997a). Noxious Weed Identification and Prevention, USDOl, BLM, UAF Cooperative Extension Service. 2004.

- BLM (1997b). Special Management Areas.
- BLM (1997c). Roswell Approved Resource Management Plan and Record of Decision, Appendix 5: Acquisition, Retention, and Disposal Criteria. R. F. Office.
- BLM (1998a). The Grand Staircase-Escalante National Monument Draft Management Plan and Environmental Impact Statement. Kanab, UT, BLM Grand Staircase-Escalante National Monument.
- BLM (1998b). Northeast National Petroleum Reserve - Alaska Final Integrated Activity Plan/Environmental Impact Statement, USDOI BLM and Minerals Management Service.
- BLM (2000a). Land Use Planning Handbook.
- BLM (2000b). Instruction Memorandum No. AK 2000-056: 2001 Public Easement Review Process. USDOI State Director. Anchorage, USDOI.
- BLM (2001a). Energy Policy and Conservation Act. BLM. 2005.
- BLM (2001b). Manual 6840 - Special Status Species Management.
- BLM (2001c). Partial Revocation of Public Land Order No. 5108, Snettisham Power Project Environmental Assessment. Anchorage, AK, BLM Anchorage Field Office: 7.
- BLM (2001d). Whittaker Recreation Site Water System Upgrade Environmental Assessment and Preliminary Finding of No Significant Impact. Eugene, OR, USDOI, BLM, Eugene District.
- BLM (2002a). Environmental Assessment for Temsco Helicopters Inc. and Alaska Mountain Guides & Climbing School. Anchorage, AK, BLM, Anchorage Field Office, Outdoor Recreation.
- BLM (2002b). Decision Record and Finding of No Significant Impact for Temsco Helicopters Inc. and Alaska Mountain Guides. Anchorage, AK, BLM, Anchorage Field Office, Outdoor Recreation.
- BLM (2002c). Decision Record and Finding of No Significant Impact for Out of Bounds Adventures Alaska Heliskiing, Southeast Alaska Backcountry Adventures and Teton Gravity Research. Anchorage, AK, BLM, Anchorage Field Office.
- BLM (2002d). Environmental Assessment for Out of Bounds Adventures, Southeast Backcountry Adventures, and Teton Gravity Research. Anchorage, AK, BLM Anchorage Field Office: 28.
- BLM (2002e). BLM Manual 8400: Visual Resource Management.
- BLM (2003a). Alaska Land Distribution Statistics, USDOI, BLM Division of Conveyance Management. 2004.
- BLM (2003b). Iditarod National Historic Trail Management. 2004.
- BLM (2003c). Ring of Fire Resource Management Plan and Environmental Impact Statement April 2003 Newsletter. Anchorage, AK, BLM Anchorage Field Office. 2005.

- BLM (2003d). Frequently Asked Questions (FAQs). Washington, D.C., USDOl, U.S. BLM Office of Public Affairs. 2005.
- BLM (2003e). The Abandoned Mine Lands (AML) Program. 2004.
- BLM (2004a). Bureau of Land Management's Weeds Website. Washington, D.C., BLM Office of Public Affairs. 2004.
- BLM (2004b). Draft Dillon Resource Management Plan and Environmental Impact Statement: 256-258 pp.
- BLM (2004c). Abandoned Mines Land (AML) Program. Abandoned Mine Lands. BLM.
- BLM (2004d). Electronic Geospatial Data Showing Federal and State of Alaska Mining Claims. Anchorage, AK, one CD-ROM.
- BLM (2004e). Explanation of "Discovery". 2004.
- BLM (2004f). Knik River Access Area Clean Up. Anchorage, AK, BLM-Alaska Anchorage Field Office. 2005.
- BLM (2004g). Bobby Creek Research Natural Area Management Plan, BLM Medford District.
- BLM (2004h). Campbell Tract Fire Hazards: BLM Manages Potential Fire Hazards at Campbell Tract. Anchorage, AK, BLM-Alaska Anchorage Field Office. 2005.
- BLM (2004i). BLM Alaska Endangered and Sensitive Species List. Glennallen, AK, USDOl BLM Glennallen Field Office. 2005.
- BLM (2004j). Burned Area Emergency Stabilization & Rehabilitation Plan: Wildlife Resource Assessment. BLM Fairbanks and Anchorage Field Offices, Yukon National Wildlife Refuge, BIA Alaska Regional Office, USGS Biological Research Division, and ADF&G.
- BLM (2004k). BLM Anchorage Field Office Forestry Program. 2005.
- BLM (2004l). Finding of No Significant Impact for Bureau of Land Management Land Use Plan Amendment for Wildland Fire and Fuels Management Environmental Assessment No. AK-313-04-EA-001. Anchorage, AK, BLM-Alaska.
- BLM (2004m). Campbell Tract Facility Master Plan Environmental Assessment. Anchorage, AK, Anchorage Field Office: 53.
- BLM (2004n). Decision Record and Finding of No Significant Impact for Campbell Tract Facility Master Plan. Anchorage, AK, Anchorage Field Office: 4.
- BLM (2004o). Mitigation Measures for the CTF Master Plan Meadows Site Plan. Anchorage, AK, Anchorage Field Office: 3.
- BLM (2004p). Administrative Determination (AD) Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA). Anchorage, AK, USDOl, BLM Anchorage Field Office: 4.
- BLM (2004q). Draft Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States, USDOl, BLM.

- BLM (2004r). Draft Reasonable Foreseeable Development Scenario for Oil and Natural Gas Resources in the Ring of Fire Planning Area, Alaska. Anchorage, AK, BLM Division of Energy and Solid Minerals: 73.
- BLM (2004s). BLM Lands and Realty: Rights-of-Way. Washington, D.C., Lands and Realty Group. 2005.
- BLM (2004t). Alpine Satellites Development Plan Environmental Impact Statement. Anchorage, AK, USDOl, BLM.
- BLM (2004u). Statewide Land Health Standards. Anchorage, AK.
- BLM (2005). Decision Record for the Land Use Plan Amendment for Wildland Fire and Fuels Management for Alaska Environmental Assessment. AK-313-04-EA-001. Anchorage, AK BLM-Alaska.
- BLM (2005a). Energy Fuel for Thought: Some Basic Energy Information. 2005.
- BLM (2005b). Glennallen District Map. 2005.
- BLM (2005c). Public Lands Administered by the Anchorage Field Office. 2005.
- BLM (2005d). In the Spotlight... Solar Energy, Wind Energy. 2005.
- BLM (2005e). BLM-Alaska Anchorage Field Office Home Page. Anchorage, AK, BLM Anchorage Field Office. 2005: Home Page.
- BLM (2005f). BLM Special Areas. Ely District Resource Management Plan/Environmental Impact Statement. Ely, NV, BLM Ely District. 2005.
- BLM (2005g). Bureau of Land Management Office of Fire and Aviation. Boise, ID, National Office of Fire and Aviation. 2005.
- BLM (2005h). McGregor Range Draft Resource Management Plan Amendment and Environmental Impact Statement. Las Cruces, NM, USDOl, BLM, Las Cruces Field Office: 282.
- BLM (2005i). Marathon Oil Company Drilling of a Natural Gas Well in Kenai Beluga Unit Well KBU 22-6: Summary for AD05-012. Anchorage, AK, BLM-Alaska Anchorage Field Office. 2005.
- BLM (2005j). State of Alaska, Department of Transportation: Summary for EA05-009. Anchorage, AK, BLM-Alaska Anchorage Field Office. 2005.
- BLM (2005k). Frequently Asked Questions. Anchorage, AK, Alaska Fire Service. 2005.
- BLM (2005l). BLM Manual H-1601-1 Land Use Planning Handbook.
- BLM (2005m). Vegetation EIS Update. Reno, NV, USDOl, BLM. 3.
- BLM (2005n). Sand Mountain Area of Critical Environmental Concern. Internal Nomination (BLM) and Analysis. Fallon, NV. 2005.

- BLM (2005o). Draft Ring of Fire RMP Reasonable Foreseeable Development Scenario, Locatable and Salable Minerals. Anchorage, AK, BLM Division of Energy and Solid Minerals, BLM Anchorage Field Office: 37.
- BLM (2005p). Land Acquisition (Exchange/Purchase/Donation). 2005.
- BLM (2005q). Campbell Tract FAQs Anchorage Field Office. 2005.
- BLM (2005r). Payment in Lieu of Taxes Database. 2005.
- BLM (2005s). Northeast NPR-A Integrated Activity Plan Environmental Impact Statement. Anchorage, AK, USDOl, BLM.
- BLM (2005t). Land Use Planning Handbook H-1601-1, USDOl, BLM: 161.
- BLM and U.S. Department of Energy (2003). Assessing the Potential for Renewable Energy on Public Lands.
- Boone, D. L. (1993). Annual Report on Caribou Management at Adak Island, Alaska 1992-1993. Adak, AK, USFWS: 9.
- Boreal Partners in Flight (1999). Landbird Conservation Plan for Alaska Biogeographic Regions, Version 1.0. B. A. Andres. Anchorage, AK, USFWS, Boreal Partners in Flight Working Group: 116.
- Braham, H. W., R. D. Everitt, et al. (1980). "Northern Sea Lion Decline in the Eastern Aleutian Islands." Journal of Wildlife Management 44: 25-33.
- Breiwick, J. W. (1999). Gray Whale Abundance Estimates, 1967/68-1997/98: ROI, RY, and K. Status Review of the Eastern North Pacific Stock of Gray Whales. D. J. Rugh, M. M. Muto, S. E. Moore and D. P. DeMaster, NOAA Tech. Memo. NMFS-AFSC-103, USDOC: 96.
- Brewer, R. (1994). The Science of Ecology. Orlando, FL, Saunders College Publishing.
- Broderson, K. (1994). Frogs and Toads. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Brodner, R. D. and M. S. Busby (1998). "Occurrence of an Atlantic Salmon, *Salmo salar*, in the Bering Sea." Alaska Fishery Research Bulletin 5(1).
- Bromley, R. G. and T. C. Rothe (2003). Conservation Assessment for the Dusky Canada Goose (*Branta canadensis occidentalis* Baird). Portland, OR, USFS Pacific Northwest Research Station.
- Brooks, A. H. (1973). Blazing Alaska's Trails. Fairbanks, AK, University of Alaska Press.
- Brown, G. (2002). Alaska Exceptionality Hypothesis: Is Alaska Wilderness Really Different? Wilderness in the Circumpolar North: Searching for Compatibility in Ecological, Traditional, and Ecotourism Values, Proc RMRS-P-26, Anchorage, AK, USDA, USFS Rocky Mountain Research Station, Ogden, UT.

- Bruns, T. R. (1996). Gulf of Alaska. Digital Map Data, Text, and Graphical Images in Support of the 1995 National Assessment of United States Oil and Gas Resources. W. R. Beeman, R. C. Obuch and J. D. Brewton, USGS Digital Data Series DDS-35, one CD-ROM.
- Bryner, W. M. (1995). "Toward a Group Rights Theory for Remedying Harm to the Subsistence Culture of Alaska Natives." Alaska Law Review 12(2): 293-294.
- Bryson, G. (2004). Wind Farm on Fire Island? Generating Dreams. Anchorage Daily News. Anchorage, AK: A-1.
- Bundtzen, T. K., G. R. Eakins, et al. (1982). Review of Alaska's Mineral Resources, 1981-82, ADNR DGGS: 52 pp.
- Bureau of Land Management in Cooperation with the Montana Board of Oil and Gas Conservation (2003). "Montana Final Statewide Oil and Gas Environmental Impact Statement (EIS) and Proposed Amendment to the Powder River and Billings Resource Management Plan." 592 pp.
- Butzer, C., R. F. Butler, et al. (2004). "Neogene Tilting of Crustal Panels near Wrangell, Alaska." Geology 32(12): 1061-1064.
- Byrd, G. V. (1998). Current Breeding Status of the Aleutian Canada Goose, a Recovering Endangered Species. Biology and Management of Canada Geese, Proceedings of the International Canada Goose Symposium, Milwaukee, WI.
- Byrd, G. V. and R. H. Day (1986). "The Avifauna of Buldir Island, Aleutian Islands, Alaska." Arctic 39: 109-118.
- Caithamer, D. F. (2001). Trumpeter Swan Population Status, 2000. Laurel, MD, USFWS Division of Migratory Bird Management.
- Calkins, D. G. (1994). Steller's Sea Lion. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Calkins, D. G., D. C. McAllister, et al. (1999). "Steller Sea Lion Status and Trend in Southeast Alaska: 1979-1997." Marine Mammal Science 15: 462-477.
- Calkins, D. G. and K. W. Pitcher (1982). Population Assessment, Ecology, and Trophic Relationships of Steller Sea Lions in the Gulf of Alaska, USDOC, NOAA: 445-546.
- Campaign for America's Wilderness (2003). RS2477 and Disclaimer Rule: Environmental, Economic, and Policy Impacts. 2005.
- Carretta, J. V., J. Barlow, et al. (2001). U.S. Pacific Marine Mammal Stock Assessments: 2001.
- Carroll, G. (1994). Bowhead Whale Species Account. Wildlife Notebook Series, ADF&G. 2005.
- Carroll, G., K. Reeves, et al. (2004). Evaluation of Potential Hydropower Sites Throughout the United States. User Conference. ESRI. San Diego, CA.
- Carstensen, R., M. Wilson, et al. (2003). Habitat Use of Amphibians in Northern Southeast Alaska. Juneau, AK, ADF&G, Discovery Southeast.

- Catton, T. (1995). Land Reborn: A History of Administration and Visitor Use in Glacier Bay National Park and Preserve. Seattle, WA, Government Printing Office.
- CBJ (2003). Draft Natural Hazards Mitigation Plan. Juneau, AK, City and Borough of Juneau.
- CBJ (2004). Parks and Recreation, City and Borough of Juneau. 2004.
- Center for Biological Diversity, Coastal Coalition, et al. (2001). Petition to List the Kittlitz's Murrelet (*Brachyramphus brevirostris*) as Endangered under the Endangered Species Act, Submitted to the U.S. Secretary of the Interior on May 9, 2001.
- Center for Water and Wildland Resources (1996). Fire and Fuels. Status of the Sierra Nevada: Summary of the Sierra Nevada Ecosystem Project Report. Davis, CA, University of California. Volume 1: 61-71.
- Chase Citizens Planning Advisory Committee and Matanuska-Susitna Borough Planning Department (1993 [as amended]). "Chase Comprehensive Plan."
- Christensen, B. and C. V. Van Dyke (2004). Brown Bear (*Ursus arctos*) Habitat and Signs of Use: Berners Bay, Alaska Site Survey - June 15-19, 2003. Juneau, AK, Southeast Alaska Wilderness Exploration, Analysis & Discovery.
- Chugach Electric Association (2005). Environmental Report for Chugach Electric Fire Island Wind and Transmission Line Feasibility Study. Anchorage, AK, Prepared by URS Corporation: 65.
- City of Cordova (1980). Cordova Coastal Management Program. Cordova, AK, City of Cordova, Alaska Coastal Management Program: 202.
- City of Haines (2000). City of Haines Comprehensive Plan. Haines, Alaska.
- Clark, D. (1984a). Prehistory of Pacific Eskimo Region. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic: 136-148.
- Clark, D. (1984b). Pacific Eskimo: Historical Ethnography. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic.
- Clark, D. W. (1981). Prehistory of the Western Subarctic. Handbook of North American Indians. J. Helm and W. Sturtevant. Washington, D.C., Smithsonian Institute. Volume 6: Subarctic.
- Clark, D. W. (1997). The Early Kachemak Phase on Kodiak Island at Old Kiavak. Mercury Series, Archaeological Survey of Canada Paper 155, Canadian Museum of Civilization. Quebec.
- Clough, A. H. (1988). Coast Range Subarea. Bureau of Mines Mineral Investigations in the Juneau Mining District, Alaska, 1984-1988. USBOM, Special Publication by USBOM, Juneau Branch, Alaskan Field Operations Center. Volume 2 - Detailed Mine, Prospect, and Mineral Occurrence Descriptions, Section E: 44.
- CNIPM (2004). 2004 CNIPM Minutes. Internet, CNIPM.

- CNIPM (2004). Invasive Plants, CNIPM. 2004.
- Cohen, K. (1988). A Comprehensive Study of Wild Resource Use by Wrangell Residents. Juneau, AK, ADF&G, Division of Subsistence.
- Colt, S. (2001). The Economic Importance of Healthy Alaska Ecosystems. Anchorage, AK, Prepared for the Alaska Conservation Foundation. Prepared by Institute of Social and Economic Research, University of Alaska: 52.
- Conant, B., J. I. Hodges, et al. (1993). An Atlas of the Distribution of Trumpeter Swans in Alaska, Volume 1. Juneau, AK, USFWS Migratory Bird Management.
- Conn, J. and M. Shepherd (2004). White Sweetclover Invasions on Alaska Floodplains. Integrated Pest Management Strategies for Alaskan Agriculture, Fairbanks, AK, USDA Agricultural Research Service.
- Connery, B. (1984). Mechanized Trail Survey, Wrangell-St. Elias National Park and Preserve. Copper Creek, AK, USDOI, NPS, Wrangell-St. Elias National Park and Preserve.
- Conroy, C. J., J. R. Demboski, et al. (1999). "Mammalian Biogeography of the Alexander Archipelago of Alaska: A North Temperate Nested Fauna." Journal of Biogeography 26(2): 343-352.
- Cowardin, L. M., V. Carter, et al. (1979). Classification of Wetlands and Deepwater Habitats of the United States. Washington, D.C., U.S. Fish and Wildlife Service.
- Cox, D. P. and D. A. Singer, Eds. (1986). Mineral Deposit Models. 3rd printing 1992, USGS Geological Survey Bulletin 1693.
- Crawford, P. L. (1987). Tsunami Predictions for the Coast of Kodiak Island to Ketchikan, USACE Coastal Engineering Research Center: 23, 77 plates.
- D. Hittle & Associates Inc. (2003). Southeast Alaska Intertie Study. Juneau, AK.
- Davis, N. (1984). Energy Alaska, University of Alaska Press.
- Davis, N. Y. (1984). Contemporary Pacific Eskimo. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic: 198-204.
- Davis, S. D. (1990). Prehistory of Southeastern Alaska. Handbook of North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institute. Volume 7: Northwest Coast.
- Day, R. H., K. J. Kuletz, et al. (1999). Kittlitz's Murrelet (*Brachyramphus brevirostris*). The Birds of North America. A. Poole and F. Gill. Philadelphia, PA and Washington, D.C., Academy of Natural Sciences and American Ornithologists Union.
- DCCED (2004a). Alaska Community Database Community Information Summaries: Adak. 2005.
- DCCED (2004b). Lake and Peninsula Borough: Economic Overview. 2004.

- DCCED (2004c). Table 3: 2000 Local Property and Oil & Gas Property Tax Revenues, DCED. 2005.
- DCCED (2005). Alaska Community Database Community Information Summaries (CIS), DCED, Division of Community Advocacy. 2005.
- DeGange, A. R. (1996). A Conservation Assessment for the Marbled Murrelet in Southeast Alaska, USDA, USFS, Pacific Northwest Research Station: 82.
- DeLaguna, F. (1990). Tlingit. Handbook in North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 7: Northwest Coast: 203-228.
- Denali Commission (2003). Iliamna R. Bridge Replacement on Williamsport to Pile Bay Road. Anchorage, AK, ADOT&PF.
- Denali National Park and Preserve and National Park Service (2006). Denali National Park and Preserve Final South Denali Implementation Plan and Environmental Impact Statement, Denali Park, Alaska. USDOl.
- Department of Environmental Protection (1999). Act 54 Report on the Effects of Underground Coal Mining, Pennsylvania Department of Environmental Protection.
- Department of Fisheries and Oceans Canada (1999). Eulachon. DFO Science Stock Status Report: Nanaimo, BC, Department of Fisheries and Oceans, Canada.
- Detterman, R. L., J. E. Case, et al. (1996). "Stratigraphic Framework of the Alaska Peninsula." USGS Bulletin 1969-A: 1-74.
- Dillon, R. A. (2004). Yup'ik Leaders Upset with Subsistence Restrictions. Juneau Empire.
- Doroff, A. M., J. A. Estes, et al. (2003). "Sea Otter Population Declines in the Aleutian Archipelago." Journal of Mammalogy 84(1): 55-64.
- Dumond, D. (1987). Eskimos and Aleuts, Revised Edition. New York City, NY, Thames and Hudson.
- Dumond, D. E. (1984). Prehistory of the Bering Sea Region. Handbook of North American Indians. V. E. David Damas. Washington, DC, Smithsonian Institution. 5.
- Dunn, J. A. and A. Booth (1990). Tsimshian of Metlakatla, Alaska. Handbook of North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 7: Northwest Coast: 294-297.
- Ehm, A. (1983). Oil and Gas Basins Map of Alaska, ADNDR DGGS: 1 map sheet, scale 1:2,500,000.
- Eide, S. (1994). Roosevelt Elk. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Eide, S. and S. Miller (2003). Brown Bear. Wildlife Notebook Series. D. Reynolds. Anchorage, AK, ADF&G. 2005: Revised by H. Reynolds and reprinted 1994, website revisions 2003.

- Eisenhauer, D. I. and C. M. Kirkpatrick (1977). Ecology of the Emperor Goose in Alaska. Wildlife Monographs. Washington, D.C. 57: 61.
- Ellanna, L. J. and G. K. Sherrod (1986). Timber Management and Fish and Wildlife Use in Selected Southeast Alaska Communities: Klawock, Prince of Wales, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Elliott, D. L., C. G. Holladay, et al. (1987). Wind Energy Resource Atlas of the United States. N. R. E. Laboratory.
- Ellison, L. N. (1994). Grouse. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005.
- Ely, C. R. and A. X. Dzubin (1994). Greater White-fronted Goose (*Anser albifrons*). The Birds of North America, No. 131. A. Poole and F. Gill. Washington, D.C., Academy of Natural Sciences, Philadelphia, PA and American Ornithologists' Union.
- Emmett, R. L., S.A. Hinton, et al. (1991). Distribution and Abundance of Fishes and Invertebrates in West Coast Estuaries, Volume II: Species Life History Summaries. ELMR Rep. No. 8 NOAA/NOS Strategic Environmental Assessments Division. Rockville, MD.
- Endter-Wada, J., R. Mason, et al. (1993). The Kodiak Region. Social Indicators Study of Alaskan Coastal Villages. New Haven, CT, USDOI, Mineral Management Service, Alaska OCS Region, Human Relations Area Files. Volume IV: Postspill Key Informant Summaries: Schedule C Communities, Part 2: (Kenai, Tyonek, Seldovia, Kodiak City, Karluk, Old Harbor, Chignik).
- ENSR Corporation and Booz Allen & Hamilton Inc. (2003). Mineral Occurrence and Development Potential Report, Rawlins Resource Management Plan Planning Area, Prepared for the BLM, Rawlins Field Office.
- Environmental Laboratory (1987). Corps of Engineers Wetlands Delineation Manual. Vicksburg, MS, U.S. Army Engineer Waterways Experiment Station: 100.
- Ercelawn, A. (1999). End of the Road: The Adverse Ecological Impacts of Roads and Logging: A Compilation of Independently Reviewed Research, Natural Resources Defense Council.
- Ernst, C. H. and R. W. Barbour (1989). Turtles of the World. Washington D.C., Smithsonian Institute Press.
- Ernst, R. (2001). Concern for Wilderness Caribou. Wildlife Notebook Series. Soldotna, AK, USFWS, Kenai National Wildlife Refuge. 2005.
- Estes, J. A. (1980). "*Enhydra Lustris*." Mammalian Species 133: 1-8.
- Estes, J. A., M. T. Tinker, et al. (1998). "Killer Whale Predation on Sea Otters Linking Oceanic and Nearshore Ecosystems." Science 282: 473-476.
- Exxon Valdez Oil Spill Trustee Council (2004). Exxon Valdez Oil Spill Trustee Council Work Plan, FY 2005-FY 2007. Anchorage, AK.

- Fadley, B. S. and M. A. Castellini (1996). Recovery of Harbor Seals from EVOS: Condition and Health Status. Exxon Valdez Oil Spill Restoration Project, Annual Report (Restoration Project 95001). Fairbanks, AK, University of Alaska: 39.
- Fadley, J. (1999). "Short-tailed Albatross: Back from the Brink." USFWS Endangered Species Bulletin XXXIV(2).
- Fall, J. A. (1981). Traditional Resource Uses in the Knik Arm Area: Historical and Contemporary Patterns. Juneau, AK, ADF&G, Division of Subsistence.
- Fall, J. A., D. J. Foster, et al. (1983). The Use of Moose and Other Wild Resources in the Tyonek and Upper Yetna Areas: A Background Report. Juneau, AK, ADF&G, Division of Subsistence.
- Fall, J. A., D. J. Foster, et al. (1984). The Use of Fish and Wildlife Resources in Tyonek, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Fall, J. A., R. Miraglia, et al. (2001). Long-Term Consequences of the *Exxon Valdez* Oil Spill for Coastal Communities of Southcentral Alaska. Juneau, AK, ADF&G.
- Fall, J. A., R. T. Stanek, et al. (1996). The Harvest and Use of Fish and Wildlife, and Plant Resources in False Pass, Unimak Island, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Fall, J. A. and C. J. Utermohle (1999). Subsistence Harvests and Uses in Eight Communities Ten Years After the *Exxon Valdez* Oil Spill, Technical Paper Number 252. L. Brown, R. Dunbar, M. Guerrero et al. Juneau, AK, ADF&G, Division of Subsistence.
- Fall, J. A. and R. J. Walker (1993). Subsistence Harvests in Six Kodiak Island Borough Communities, 1986. Juneau, AK, ADF&G, Division of Subsistence.
- Farmer, C. J., M. D. Kirchoff, et al. (2001). Effects of Even-Aged Timber Management on Survivorship in Sitka Black-Tailed Deer. Juneau, AK, ADF&G, Division of Wildlife Conservation.
- FedStats (2000). MapStats: Crimes Reported in Aleutians East Borough Alaska Crime 2000. 2005.
- FedStats (2004). FedStats: The Gateway to Statistics from Over 100 U.S. Federal Agencies. 2005.
- FEMAT (1993). Forest Ecosystem Management: An Ecological, Economic, and Social Assessment, USDA, USFS, USDOC, NOAA, NMFS, USDOJ, BLM, USFWS, NPS, and USEPA.
- Fesler, D. and J. Fredston (1999). Turnagain Pass, Alaska Avalanche Accident, Alaska Mountain Safety Center, Inc. 2005.
- FHWA (2004). Federal Highway Administration Finding of No Significant Impact for Aleknagik Wood River Bridge Project No. STP-0001(152)/53581, FHWA: 3.
- FHWA and ADOT&PF (1984). Draft Environmental Impact Statement and Section 4(f) Evaluation Knik Arm Crossing. Anchorage, AK.

- FHWA and Federal Transit Administration (2001). Iditarod National Historic Trail Field Report. Federal Lands Alternative Transportation Systems Study. Cambridge Systematics Inc., C. Ecker, D. Krechmer and L. Grimm. Volume 3: Summary of National ATS Needs.
- Fiorillo, A. R., V. L. Santucci, et al. (2001). Establishing Baseline Paleontological Data for Research and Management Needs: Lessons Learned from the NPS Alaska Region. Proceedings of the 6th Fossil Resource Conference.
- Firman, A. S. and R. G. Bosworth (1990). Harvest and Use of Fish and Wildlife Resources by Residents of Kake, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Fitzhugh, W. (2005). Gulf of Alaska Dates. 2005.
- Flekentein, R. (2004). Written Communication.
- Flint, P. L. and M. P. Herzog (1999). "Breeding of Steller's Eiders, *Polysticta Stelleri*, on the Yukon-Kuskokwim Delta, Alaska." Canadian Field-Naturalist 113: 306-308.
- Foote, M. J. (1983). Classification, Description, and Dynamics of Plant Communities after Fire in the Taiga of Interior Alaska. Portland, OR, USFS: 108.
- Forest Encyclopedia Network (2005). Bottomland Hardwood Forest Management. 2005.
- Foster, D. J. (1982). The Utilization of King Salmon and the Annual Round of Subsistence Uses in Tyonek, Alaska. Anchorage, AK, ADF&G, Division of Subsistence.
- Fox, J. L. (1983). Constraints on Winter Habitat Selection by the Mountain Goat (*Oreamnos americanus*) in Alaska. Seattle, WA, University of Washington.
- Fraser, D. G. and H. F. Barnett (1959). "Geology of the Delarof and Westernmost Andreanof Islands, Aleutian Islands, Investigations of Alaskan Volcanoes." Geological Survey Bulletin 1028.
- Fritz, C. (2005). Plan is Needed to Preserve Jim-Swan Area. Anchorage Daily News.
- Froese, R. and D. Pauly (2005). FishBase. Global Information System on Fishes.
- Frost, K. (1994). Gray Whale Species Account. Wildlife Notebook Series, ADF&G.
- Frost, K. F., L. F. Lowry, et al. (1997). Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals in Prince William Sound, Alaska. Fairbanks, AK, *Exxon Valdez Oil Spill Restoration Project Annual Report*, ADF&G, Division of Wildlife Conservation: 131.
- Fussel, L. M. S. (1997). "Exposure of Snowmobile Riders to Carbon Monoxide: Emissions Pose Potential Risk." Park Science: Integrating Research and Resource Management 17(1): 1, 8-10.
- Gabriel, H. W. and G. F. Tande (1983). A Regional Approach to Fire History in Alaska. Anchorage, AK, USDOI, BLM: 32.
- Gallant, A. L., E. F. Binnian, et al. (1995). Ecoregions of Alaska, USGS: 73.

- Gautier, D. L., G.L. Dolton, et al. (1996). 1995 National Assessment of United States Oil and Gas Resources - Results, Methodology, and Supporting Data: U.S. Geological Survey Digital Data Series 30, Version 2 corrected.
- Gentry, R. L. (1998). Behavior and Ecology of the Northern Fur Seal. Princeton, NJ, Princeton University Press.
- George, G. D. and R. G. Bosworth (1988). Use of Fish and Wildlife by Residents of Angoon, Admiralty Island, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Gibson, D. D. (1981). "Migrant Birds at Shemya Island, Aleutian Islands, Alaska." The Condor 83: 65-77.
- Gibson, D. D., S. C. Hainl, et al. (2005). Checklist of Birds of Alaska. Fairbanks, AK, Compiled by the Alaska Checklist Committee, University of Alaska Museum.
- Gibson, J. R. (1976). Imperial Russia in Frontier America: The Changing Geography of Supply of Russian America, 1784-1867. New York City, NY, Oxford University Press.
- Gill Jr., R. E. and C. M. Handel (1981). Shorebirds of the Eastern Bering Sea. The Eastern Bering Sea Shelf: Oceanography and Resources. D. W. Hood and J. A. Calder. Seattle, WA, University of Washington Press. Volume 2: 719-738.
- Gill Jr., R. E. and T. L. Tibbitts (1999). Seasonal Shorebird Use of Intertidal Habitats in Cook Inlet, Alaska, Final Report, USDOI, USGS, Biological Resources Division and OCS Study: 55.
- Gill Jr., R. E., T. L. Tibbitts, et al. (2004). Status of the Marbled Godwit (*Limosa fedoa*) on BLM lands on the Alaska Peninsula, May 2004. Anchorage, AK, Available by request from the BLM Anchorage Field Office.
- Gorbics, C. S. and J. L. Bodkin (2001). "Stock Structure of Sea Otters (*Enhydra lutris kenyoni*) in Alaska." Marine Mammal Science 17(3): 632-647.
- Gosho, M. E., D. W. Rice, et al. (1984). "The Sperm Whale (*Physeter macrocephalus*). " Marine Fisheries Review 46(4): 54-64.
- Goudie, R. I., S. Brault, et al. (1994). The Status of Sea Ducks in the North Pacific Rim: Toward Their Conservation and Management. Transactions of the 59th North American Wildlife and Natural Resources Conference. A. M. Martell and A. W. Palmisano: 27-49.
- Gratto-Trevor, C. L. (2000). Marbled Godwit (*Limosa fedosa*). The Birds of North America, No. 492. A. Poole and F. Gill. Philadelphia, PA, The Birds of North America, Inc.
- Griffiths, M. and D. Woynillowicz (2003). Oil and Troubled Waters; Reducing the Impact of the Oil and Gas Industry on Alberta's Water Resources. Alberta, Canada, Pembina Institute for Appropriate Development.
- Groves, D. J., B. Conant, et al. (1996). "Status and Trends of Loon Populations Summering in Alaska, 1971-1993." The Condor 98: 189-195.
- Gurevich, V. S. (1980). Worldwide Distribution and Migration Patterns of the White Whale (Beluga) (*Delphinapterus leucas*), Report of the International Whaling Commission: 465-480.

- Haagstrom, D. A. (2003). Managing Fire in the Urban Interface of Interior Alaska (Extended Abstract). 2nd International Wildland Fire Ecology and Fire Management Congress and 5th Symposium on Fire and Forest Meteorology, Orlando, FL.
- Haeussler, P. J., R. L. Bruhn, et al. (2000). Potential Seismic Hazards and Tectonics of the Upper Cook Inlet Basin, Alaska, Based on Analysis on Pliocene and Younger Deformation, Geological Society of America Bulletin. 112: 1414-1429.
- Haftl, L. (1997). Fire on Kodiak Island. Wildland Firefighter Magazine.
- Haines Borough (2004). Alaska's Draft Comprehensive Plan.
- Hamilton, T. D., K. M. Reed, et al. (1986). Glaciation in Alaska: The Geologic Record. Anchorage, AK, Alaska Geological Society: 265.
- Hardy, C. C., K.M. Schmidt, J.P. Menakis, R. Samson (2001). "Spatial Data for National Fire Planning and Fuel Management." International Journal of Wildland Fire 10(3&4): 353-372.
- Harris, A. G. (1984). Report on Referred Fossils: Conodonts, Lake Clark and Healy Quadrangles. Alaska Paleontological Database, USGS.
- Hawley, C. C. and Arctic Environmental Information and Data Center (AEIDC) (1982). Mineral Terranes of Alaska; Including Coal: Anchorage, University of Alaska, Scale 1:1,000,000, 6 sheets.
- Hazard, K. (1988). Beluga Whale (*Delphinapterus leucas*). Selected Marine Mammals of Alaska: Species Accounts with Research and Management Recommendations. J. W. Lentfer. Washington D.C., Marine Mammal Commission: 195-235.
- HDR Engineering Inc. (1995). Cumulative Impacts in Alaska: Where They Occur and How Agencies and District Address Them. Juneau, Alaska, Office of the Governor, Division of Governmental Coordination: 103.
- Heaton, T. H. (2003). Ice Age Paleontology of Southeast Alaska, University of South Dakota. 2005.
- Hebert, M. (2001). Strategic Plan for Noxious and Invasive Plants Management in Alaska. Fairbanks, Alaska, CNIPM, UAF: 21.
- Heimer, W. E. (1994). Dall Sheep. Wildlife Notebook Series. K. Whitten. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Hodge, R. P. (1979). "*Dermochelys Coriacea Schlegeli* (Pacific Leatherback)." Herpetological Review 10(3): 102.
- Hopkins, D. M., J. V. Matthews Jr., et al., Eds. (1982). Paleoecology of Beringia. New York, NY, Academic Press.
- Howe, J., E. McMahon, et al. (1997). Balancing Nature and Commerce in Gateway Communities. Washington, DC, Island Press.
- Hulten, E. (1937). Outline of the History of the Arctic and Boreal Biota During the Quaternary Period. Stockholm, Sweden, Bokforlags Aktiebolaget Thule.

- Hulten, E. (1968). Flora of Alaska and Neighboring Territories, Stanford University Press.
- Illinois Watershed Management Clearinghouse (2005). NEMO- Nonpoint Education for Municipal Officials: Impacts of Development on Waterways. 2005.
- Islieb, M. E. (1984). Birds of the Chugach National Forest. Jamestown, ND, USFS, Northern Prairie Wildlife Research Home Page. 2005.
- Islieb, M. E. and B. Kessel (1973). Birds of the North Gulf Coast-Prince William Sound Region, Alaska: 1-149.
- Iverson, G. C., G. D. Hayward, et al. (1996). Conservation Assessment for the Northern Goshawk in Southeast Alaska, USDA, USFS, Pacific Northwest Research Station: 108.
- Jack, L. (2000). "Testimony on the Marine Mammal Protection Act of 1972 before the U.S. House Subcommittee on Fisheries Conservation, Wildlife and Oceans on 6 April 2000 by Lianna Jack, Executive Director of the Alaska Sea Otter and Steller Sea Lion Commission."
- Jacobson, M. J. and J. I. Hodges (1999). "Population Trend of Adult Bald Eagles in Southeast Alaska, 1967-97." Journal of Raptor Research 33(4): 295-298.
- Johnson, D. A., Ed. (1979). Special Management Needs of Alpine Ecosystems. Range Science Series, No. 5. Denver, CO, Society for Range Management.
- Johnson, L. (1994a). Black Bears. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Johnson, L. J. (1994b). Mountain Goat. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- KABATA (2005). Knik Arm Bridge and Toll Authority Knik Arm Crossing Project. Anchorage, AK, KABATA. 2005.
- Kachemak Bay Research Reserve and NOAA Coastal Services Center (2001). Kachemak Bay Ecological Characterization. Charleston, SC, NOAA Coastal Services Center.
- Kari, J. and J. A. Fall (2003). Shem Pete's Alaska: The Territory of the Upper Cook Inlet Dena'ina, Second Edition. Fairbanks, AK, University of Alaska Press.
- Kay, S. M. and R. W. Kay (1994). "Aleutian Magmas in Space and Time." The Geology of North America, Geological Society of America The Geology of North America Series G-1: 687-722.
- Kenai River Center (2005). Kenai River Center: Working Together to Restore and Protect our Rivers. Kenai, AK, Kenai Peninsula Borough. 2005.
- Kenedi, C. A., S. R. Brauntley, et al. (2000). Volcanic Ash Fall - A "Hard Rain" of Abrasive Particles, USGS Fact Sheet 027-00: 2.
- Kennedy, P. A. (2003). Northern Goshawk (*Accipiter Gentilis Atricapillius*): A Technical Conservation Assessment. USDA, USFS, Rocky Mountain Region, Species Conservation Project: 131.

- Kenyon, K. W. (1969). "The Sea Otter in the Eastern Pacific Ocean." North American Fauna 68: 352.
- Kenyon, K. W. and D. W. Rice (1961). "Abundance and Distribution of the Steller Sea Lion." Journal of Mammalogy 42: 223-234.
- Kertell, K. (1991). "Disappearance of the Steller's Eider from the Yukon-Kuskokwim Delta, Alaska." Arctic 44: 177-187.
- Kessel, B. (1998). Habitat Characteristics of Some Passerine Birds in Western North American Taiga. Fairbanks, AK, University of Alaska Press.
- Kessel, B. and D. D. Gibson (1978). "Status and Distribution of Alaska Birds." Studies in Avian Biology 1: 1-100.
- Kessel, B. and D. D. Gibson (1994). A Century of Avifaunal Change in Alaska. A Century of Avifaunal Change in Western North America. J. R. Jehl Jr. and N. K. Johnson, Cooper Ornithological Society Studies in Avian Biology. 15: 4-13.
- KGB (1983). Ketchikan District Coastal Management Program. Ketchikan, AK, Ketchikan Gateway Borough, Planning Department: 201.
- KGB (2000). Ketchikan 2020 Existing Conditions Report Resource Inventory per AAC Section 85.050 of the Alaska Coastal Management Program, Draft. Juneau, AK, Prepared by HDR Alaska, Inc.
- Kinkhart, E. and K. Pitcher (1994). Harbor Seal. Anchorage, AK, Wildlife Notebook Series. 2005: Revised and reprinted 1994.
- Kirchoff, M. D. (2000). Analysis and Publication of Deer Research Data in Southeast Alaska, 1978-1999. Juneau, AK, ADF&G, Division of Wildlife Conservation.
- Kirchoff, M. D. and S. R. G. Thomson (1998). Effects of Selection Logging on Deer Habitat in Southeast Alaska: A Retrospective Study. Juneau, AK, ADF&G, Division of Wildlife Conservation.
- Kirkemo, H., W.L. Newman, et al. (1997). Gold. <http://pubs.usgs.gov/gip/prospect1/goldgip/html>. U.S. Geological Survey.
- Kirschner, C. E. (1992). Map Showing Sedimentary Basins in Alaska, Plate 7. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. G-1, The Geology of Alaska.
- Klein, D. R. (1965). "Postglacial Distribution Patterns of Mammals in the Southern Coastal Regions of Alaska." Arctic 18: 7-20.
- Klein, D. R. (1991). "Caribou in the Changing North." Applied Animal Behavior Science 29: 279-291.
- KLI (1999-2004). Cook Inlet Water Quality Data.
- Kline, J. T. and D. S. Pinney (1994). Preliminary Map of Selected Occurrences of Industrial Minerals in Alaska, ADNDR DGGS: Public Data Files 95-24, 3 map sheets.

- Knecht, R. and R. Davis (2001). A Prehistoric Sequence for the Eastern Aleutians. Archaeology in the Aleut Zone of Alaska; Some Recent Research, University of Oregon Anthropological Papers No. 58.
- Kockelman, W. J. (1983). Management Concepts. Environmental Effects of Off-road Vehicles: Impacts and Management in Arid Regions. H. Wilshire and R. Webb. New York, Springer-Verlag.
- Kodiak Island Convention & Visitors Bureau and Kodiak Chamber of Commerce (2004). Explore Kodiak: Alaska's Emerald Isle, <http://www.kodiak.org/>. 2004.
- Kofinas, G. (2005). Human Role in Reindeer/Caribou Systems. Fairbanks, AK, University of Alaska, Institute of Arctic Biology. 2005.
- Kookesh, M. and K. Leghorn (1986). Timber Management and Fish and Wildlife Utilization in Tenakee Springs, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Kotzebue Electric Association (2005). Wind Energy: A Growing Wind Farm. Kotzebue. 2005.
- KPB (1989). Kenai Peninsula Borough Coastal Management Program, Draft Document. Soldotna, AK, Kenai Peninsula Borough Resource Planning Department.
- KPB (1990a). Kenai Peninsula Borough Coastal Management Program, Final Document. Soldotna, AK, Kenai Peninsula Borough, Resource Planning Department: 280.
- KPB (1990b). Appendix B: An Analysis of Potential Development and Environmental Sensitivity in the Kenai Peninsula Borough. Kenai Peninsula Borough Coastal Management Program, Final Document. Eagle River, AK, Prepared by Resource Analysis in Association with Falls Creek Environmental, Cullenberg & Associates, and Fineline Graphics.
- KPB (1992). Kenai Peninsula Borough Comprehensive Plan. Soldotna, AK, Kenai Peninsula Borough Planning Department.
- KPB (2005). Revised Kenai Peninsula Borough Coastal Management Program: Revised Public Hearing Draft. Soldotna, AK: 268.
- Krebs, C. J., S. Boutin, et al., Eds. (2001). Ecosystem Dynamics of the Boreal Forest: The Kluane Project. New York, Oxford University Press, Inc.
- Kriner, S. (2000). Wildfires Continue to Flare Up Across the West, DisasterRelief.org. 2005.
- Lance, B. K., D. B. Irons, et al. (1999). Marine Bird and Sea Otter Population Abundance of Prince William Sound, Alaska: Trends Following the T/V Exxon Valdez Oil Spill, 1989-98. Cheyenne, WY, Prepared by USFWS, Anchorage, AK and West Inc.: 117.
- Lantis, M. (1984). Aleut. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic.
- Larsen, C. F., R. J. Motyka, et al. (2004). "Rapid Uplift of Southern Alaska Caused by Recent Ice Loss." Geophysical Journal International 158(3).
- Lethcoe, J. and N. Lethcoe (1994). A History of Prince William Sound, Alaska: Revised Edition. Valdez, AK, Prince William Sound Books.

- Leung, Y.-F. and J. L. Marion (2000). Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review. Wilderness Science in a Time of Change Conference, Proceedings RMRS-P-15-VOL-5, Missoula, MT, USDA, USFS, Rocky Mountain Research, Ogden, UT.
- Lipkin, R. and D. F. Murray (1997). Alaska Rare Plant Field Guide, USFWS, NPS, BLM, ANHP and USFS.
- Loomis, J. B. (2002). Integrated Public Lands Management: Principles and Applications to National Forests, Parks, Wildlife Refuges, and BLM Lands. New York, Columbia University Press.
- Loughlin, T. R. (1997). Using the Phylogeographic Method to Identify Steller Sea Lion Stocks. Molecular Genetics of Marine Mammals. A. Dizon, S. J. Chivers and W. F. Perrin, Society of Marine Mammalogy, Special Publication #3: 159-171.
- Loughlin, T. R., D. J. Rugh, et al. (1984). "Northern Sea Lion Distribution and Abundance: 1956-80." Journal of Wildlife Management 48(3): 729-740.
- Loughlin, T. R., J. T. Sterling, et al. (2003). "Diving Behavior of Immature Steller Sea Lions (*Eumetopias jubatus*)."
Fishery Bulletin 101: 566-582.
- Lowry, L. (1994). Beluga Whale Species Account. Wildlife Notebook Series, ADF&G. 2005.
- Lucas, R. C., J. C. Hendee, et al. (1990). Wilderness Management. Golden, CO, Fulcrum Publishing.
- Lyle, W., J. Morehouse, et al. (1978). Tertiary Formations in the Kodiak Island Area, Alaska, and Their Petroleum Reserves and Source-Rock Potential, USGS.
- Lyon, B. and R. Montgomerie (1995). Snow Bunting and McKay's Bunting (*Plectrophenax Nivalis* and *Plectrophenax Hyperboreus*). The Birds of North America, No. 198-199. A. Poole and F. Gill. Washington, D.C., The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union.
- Maas, K. M., P. E. Bittenbender, et al. (1995). Mineral Investigations in the Ketchikan Mining District, Southeastern Alaska, USBOM: 606.
- Mac, M. J., P.A. Opler, et al. (1998). Status and Trends of the Nation's Biological Resources. Reston, VA, U.S. Department of the Interior, U.S. Geological Survey: 964.
- MacArthur, R. H. and E. O. Wilson (1967). The Theory of Island Biogeography. Princeton, NJ, Princeton University Press.
- MacDonald, S. O. (2003). The Amphibians and Reptiles of Alaska, A Field Handbook. Fairbanks, AK, University of Alaska Museum.
- MacDonald, S. O. and J. A. Cook (1996). "The Land Mammal Fauna of Southeast Alaska." Canadian Field-Naturalist 110: 571-599.
- MacDonald, S. O. and J. A. Cook (1999). The Mammal Fauna of Southeast Alaska. Fairbanks, AK, University of Alaska Museum.

- MacIntosh, R. (1998). Kodiak National Wildlife Refuge and Kodiak Island Archipelago Bird List. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page, USFWS.
- MAFA, M. A. F. A. (2003). "Rural Alaska Energy Plan."
- Magoon, L. B. (1996). Cook Inlet Basin. 1995 National Assessment of United States Oil and Gas Resources - Results, Methodology, and Supporting Data. D. L. Gautier, G.L. Dolton, I. Takahashi and K. L. Varnes, USGS Digital Data Series DDS-30, one CD-ROM.
- Magoon, L. B. and Z. C. Valin (1996). Cooper River Basin. 1995 National Assessment of United States Oil and Gas Resources - Results, Methodology, and Supporting Data. D. L. Gautier, G. L. Dolton, I. Takahashi and K. L. Varnes, USGS Digital Data Series DDS-30, one CD-ROM.
- Maier, J. A. K., J. M. Ver Hoef, et al. (2004 (in review)). "Distribution and Density of Moose in Relation to Landscape Characteristics: Effects of Scale." Ecological Applications.
- Maley, J. M., D. D. Gibson, et al. (2003). Biodiversity Survey 2002. Fairbanks, AK, Report to BLM from the University of Alaska Museum, Department of Ornithology.
- Manville, R. H. and S. P. Young (1965). Disturbance of Alaskan Mammals, Bureau of Sport Fisheries and Wildlife Circular 211: 74.
- Marincovich Jr., L. (1988a). Late Middle Eocene Mollusks of the Tolstoi Formation, Alaska Peninsula, and Correlations with Faunas from California to the Far-eastern U.S.S.R. Paleogene Stratigraphy, West Coast of North America. M. V. Filewicz and R. L. Squires, Pacific Section, Society of Economic Paleontologists and Mineralogists, West Coast Paleogene Symposium: 265-281.
- Marincovich Jr., L. (1988b). "Milocene Mollusks from the Lower Part of the Bear Lake Formation on Ukolnoi Island, Alaska Peninsula, Alaska." Science(397): 20.
- Markell, J. (2002a). Forest Service Extends Copter Permits. The Juneau Empire. Juneau, AK.
- Markell, J. (2002b). Plan Ups Helicopter Landings: Hold Put on More Permits Through 2004. The Juneau Empire. Juneau, AK.
- Marshak, S. (2004). Essentials of Geology, An Introduction to Planet Earth, W.W. Norton and Company. 2005.
- Maschner, H. D. G. (2002). Catastrophic Change and Regional Interaction: The Southern Bering Sea and North Pacific in a Dynamic Global System. 9th International Conference of Hunting and Gathering Societies.
- Matanuska-Susitna Borough (Alaska) Planning Department (1995 [as amended]). Big Lake Community Comprehensive Plan.
- Matanuska-Susitna Borough (Alaska) Planning Department (1999). City of Houston Comprehensive Plan.
- Matanuska-Susitna Borough (Alaska) Planning Department (1999 [as amended]). Talkeetna Comprehensive Plan.

- Matanuska-Susitna Borough (Alaska) Planning Department (2000). Sutton Comprehensive Plan.
- Matteson, S., S. Craven, et al. (2003). The Trumpeter Swan, University of Washington Extension Service.
- McAvoy, D. (2002). How to Recognize a Good Timber Harvest. Forest Management. U. S. University. Summer 2002.
- McCartney, A. P. (1984). Prehistory of the Aleutian Region. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic.
- McClellan, C. (1981). Inland Tlingit. Handbook of North American Indians. J. Helm and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 6: Subarctic.
- McClung, D. and P. Schaerer (1993). The Avalanche Handbook. Seattle, WA, The Mountaineers.
- McDermond, D. K. and K. H. Morgan (1993). Status and Conservation of North Pacific Albatrosses. The Status, Ecology, and Conservation of Marine Birds of the North Pacific. K. Vermeer, K. T. Briggs, K. H. Morgan and D. Siegel-Causey, Canadian Wildlife Service and Pacific Seabird Group: 70-81.
- McGuire, A. D. (2003). Evidence of Recent Climate Change in Terrestrial Regions of Alaska. Early Warning from Alaska: Global Warming's Front Line, Washington, DC.
- McKay, R. M. and M. J. Bounk (1987). "Underground Limestone Mining." Iowa Geology(12).
- McNab, W. H. and P. E. Avers (1994). Ecological Subregions of the United States, USFS, prepared in cooperation with Regional Compilers and the ECOMAP Team of the Forest Service.
- Mehall-Niswander, A. C. (1997). Time Budget and Habitat Use of Marbled Godwits (*Limosa fedoa beringiae*) Breeding on the Alaskan Peninsula. Corvallis, OR, Oregon State University.
- Merriam, C. H. (1898). Life Zones and Crop Zones of the United States. USDA Division of Biological Survey, Bulletin 10: 79.
- Merrick, R. L. and T. R. Loughlin (1997). "Foraging Behavior of Adult Female and Young-of-the-Year Steller Sea Lions (*Eumetopias Jubatus*) in Alaskan Waters." Canadian Journal of Zoology 75(5): 776-786.
- Merrick, R. L., T. R. Loughlin, et al. (1987). "Decline in Abundance of the Northern Sea Lion (*Eumetopias Jubatus*) in Alaska, 1956-86." Fishery Bulletin 85(2): 351-365.
- Merritt, R. D. (1986). Chronicle of Alaska Coal-mining History, ADNR DGGs: 16.
- Merritt, R. D. and C. C. Hawley (1986). Map of Alaska's Coal Resources, ADNR DGGs, in Cooperation with Alaska Coal Association: Special Report 37.
- Meyer, D. F., D. L. Hess, et al. (2001). Water Resources Data, Alaska, Water Year 2000. Anchorage, AK, USDO, USGS.

- Meyer, K. (2002). Managing Degraded Off-Highway Vehicle Trails in Wet, Unstable, and Sensitive Environments. Missoula, MT, USDA, USFS, Missoula Technology and Development Center: 48.
- Meyer, K. (2004). Managing Degraded Off-Highway Vehicle Trails in Wet, Unstable, and Sensitive Environments. Anchorage, AK, USDA, USFS Technology & Development Program, in cooperation with USDOT&PF, FHWA, USDO, and NPS. 2005.
- Miller, C. (2003). Wildland Fire Use: A Wilderness Perspective on Fuel Management. Fire, Fuel Treatments, and Ecological Restoration: Conference Proceedings; 2002 16-18 April; Proceedings RMRS-P-29. P. N. Omi and L. A. Joyce. Fort Collins, CO, USDA, USFS, Rocky Mountain Research Station: 475.
- Miller, C. (2004). Planner, Flood Insurance Program Coordinator, Alaska Division of Community Advocacy, Department of Community and Economic Development. URS: Interview.
- Mills, D. D. (1982). Historical and Contemporary Fishing for Salmon and Eulachon at Klukwan: An Interim Report. Juneau, AK, ADF&G.
- Mills, D. D. and A. S. Firman (1986). Fish and Wildlife Use in Yakutat, Alaska: Contemporary Patterns and Changes. Juneau, AK, ADF&G, Division of Subsistence.
- Mills, D. D., V. Sumida, et al. (1984). Salmon Use by Residents of the Chilkat and Chilkoot River Drainages, 1983. Juneau, AK, ADF&G, Division of Subsistence.
- Milner, A. M. and M. W. Oswood, Eds. (1995). Freshwaters of Alaska: Ecological Syntheses. New York, NY, Springer-Verlag New York, Inc.
- Minerals Management Service (2003). Cook Inlet Planning Area Oil and Gas Lease Sales 191 and 199 Final Environmental Impact Statement. Anchorage, AK, USDO, Minerals Management Service, Alaska Outer Continental Shelf Region.
- Ministry of Forestry (2001). Generic Forest Health Surveys Guidebook: Stand-level Surveys.
- Minnesotans for Responsible Recreation (1999). Off-Highway Vehicles in Minnesota. Duluth, MN.
- Minors, A. (2004). Chugach State Park Superintendent, Retired. U. Corporation: phone conversation.
- Mishler, C., R. Mason, et al. (1995). Larsen Bay. An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska. J. A. Fall and C. J. Utermohle. Anchorage, AK, ADF&G, Division of Subsistence, Submitted to USDO, Mineral Management Service, Alaska OCS Region. Volume IV: Kodiak Island.
- MOA (2000). Anchorage 2020: Anchorage Bowl Comprehensive Plan. Anchorage, Alaska, MOA Planning Department.
- MOA (2003). Universities & Medical District Framework Master Plan, Public Review Draft. Anchorage, AK, MOA Planning Department.
- MOA (2004). Recreation & Leisure, MOA. 2004.

- MOA Heritage Land Bank (2004). Bragaw Extension Site Specific Land Use Plan: Making Responsible Community Decision about Public Land, A Report for the Municipality of Anchorage, Heritage Land Bank. Anchorage, AK, Prepared by Agnew::Beck Consulting and Land Design North: 9.
- Molenaar, C. M. (1996). Alaska Peninsula. 1995 National Assessment of United States Oil and Gas Resources - Results, Methodology, and Supporting Data. D. L. Gautier, G. L. Dolton, I. Takahashi and K. L. Varnes, USGS Digital Data Series DDS-30, one CD-ROM.
- Molenaar, C. M. (1996). "Thermal Maturity Patterns and Geothermal Gradients on the Alaska Peninsula, Thermal Evolution of Sedimentary Basins in Alaska." U.S. Geological Survey Bulletin 2142: 11-19.
- Moore, S. E., K. M. Staffor, et al. (1998). "Seasonal Variation in Reception of Fin Whale Calls at Five Geographic Areas in the North Pacific." Marine Mammal Science 14(3): 617-627.
- Morrison, R. I. G., R. E. Gill Jr., et al. (2001). Estimates of Shorebird Populations in North America. Ottawa, Ontario, Canadian Wildlife Service, Environment Canada: 64.
- Morrow, J. (1980). The Freshwater Fishes of Alaska, Alaska Northwest Publishing Company, Anchorage, AK.
- Mosier, D. L. and J. D. Bliss (1992). Introduction and Overview of Mineral Deposit Modeling. Developments in Mineral Deposit Modeling: U.S. Geological Survey Bulletin 2004. J. D. Bliss: 1-5.
- Motyka, R. J., M. A. Moorman, et al. (1983). Geothermal Resources of Alaska, ADNR DGGS: Misc. Publication MP 8, 1 sheet.
- MSB (2004). Parks & Outdoor Recreation, MSB. 2004.
- Murie, O. J. (1959). Fauna of the Aleutian Islands and Alaska Peninsula, U.S. Bureau of Wildlife and Sport Fisheries: 406.
- Musk Ox Producers' Co-operative (2005). Qivuit: From the Downy Soft Under-wool of the Arctic Musk Ox. 2005.
- Myers, B., S. R. Brauntley, et al. (2004). What are Volcano Hazards?, USGS Fact Sheet 002-97. 2004.
- Nanney Jr., D. Y. (1993). City of Haines Alaska Coastal Management Program. Haines, AK.
- Nash, C. E., and Associates, D. Duffy (1997). Miller's Reach Fire Strategic Economic Recovery Plan. Matanuska-Susitna Borough Department of Planning.
- National Climactic Data Center (2002). Climate of 2002 - May Alaska Dryness, U. S. Department of Commerce, NOAA. 2005.
- National Interagency Fire Center (2000). Historical Wildland Fire Statistics: Historically Significant Wildland Fires. 2005.
- National Wildlife Refuge Association (2005). Invasive Speices: America's Silent Killer How, Invasive Species Threaten America's Unique Wildlife Heritage. 2005.

- Natural Resources Canada (2004). "Forest Fires and Sustainable Forest Management in Canada." Horizons Policy Research Initiative 6(4): 18-21.
- NatureServe (2005). NatureServe Explorer: An Online Encyclopedia of Life. Arlington, VA, NatureServe. 2005.
- Neal, C. A., T. J. Casadevall, et al. (1997). Volcanic Ash - A Danger to Aircraft in the North Pacific, USGS Fact Sheet 030-97: 2.
- Nelson, S. W. and M. L. Miller (2000). Assessment of Mineral Resource Tracts in the Chugach National Forest, Alaska, Open-File Report 00-026, USGS: 16.
- News, P. (2004). "Aurora Gas Pursues Cook Inlet Oil Plan." Petroleum News 9(42).
- NMFS (1999). "Notice of Receipt Regarding Petitions to List the Cook Inlet Beluga Whale under the ESA." Federal Register 64: 17347.
- NMFS (2000a). Endangered Species Act - Section 7 Consultation Biological Opinion and Incidental Take Statement, Authorization of Bering Sea/Aleutian Islands and Gulf of Alaska groundfish fisheries on the Fishery Management Plan for the Bering Sea/Aleutian Islands and Gulf of Alaska Groundfish, USDOC, NOAA, NMFS, Alaska Region Sustainable Fisheries Division and Protected Resources Division: 591.
- NMFS (2000b). "Final Rule Designating the Cook Inlet, Alaska, Stock of Beluga Whale as Depleted Under the Marine Mammal Protection Act (MMPA)." Federal Register 65: 34590-34597.
- NMFS (2000c). "Final Rule Concerning the Status Review for Listing the Cook Inlet Stock of Beluga Whale under the ESA." Federal Register 65: 38778-38790.
- NMFS (2001). "90-Day Finding for a Petition to List Eastern North Pacific Gray Whales as Threatened or Endangered Under the Endangered Species Act (ESA)." Federal Register 66: 32305-32310.
- NMFS (2002a). Pacific Gray Whale Population Estimate Released. Press release. P.O. Box 21668, Juneau, AK 99802-1668, NMFS Alaska Region.
- NMFS (2002b). Endangered Species Act - Section 7 Consultation Biological Opinion: Construction and Operation of the Liberty Oil Production Island.
- NMFS (2003). Final Environmental Impact Statement for Subsistence Harvest Management of Cook Inlet Beluga Whales. Juneau, AK, NMFS, Alaska Region.
- NMFS (2005). Abundance Estimates for Cook Inlet Beluga Whales, 1994-2004, NMFS Alaska Region.
- NMFS and CIMMC (2002). Agreement Between the NMFS and the Cook Inlet Marine Mammal Council (CIMMC) for the Co-management of the Cook Inlet Stock of Beluga Whale for the Year 2002, signed June 21, 2002.
- NMFS and USFWS (1998). Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle (*Dermochelys coriacea*). Silver Spring, MD, NMFS: 66.

- NOAA (2004). Pacific Coast Alaska: Dixon Entrance to Cape Spencer, Chapter 11. US Coast Pilot 8. 26: 313-315.
- NOAA (2005). Tsunami Statistics. Palmer, AK, NOAA, National Weather Service, West Coast & Alaska Tsunami Warning Center. 2005.
- NOAA Fisheries (2001). Steller Sea Lion Protection Measures Final Supplemental Environmental Impact Statement. Juneau, AK, NMFS Alaska Region.
- NOAA Fisheries (2003). Ecosystem Considerations for 2004. North Pacific Groundfish Stock Assessment Fishery Evaluation. Juneau, AK, NMFS Alaska Region.
- NOAA Fisheries (2004a). Information on Skilak Glacial Dam Lake Releases, NOAA, Alaska River Forecast Center. 2005.
- NOAA Fisheries (2004b). Alaska Groundfish Fisheries Final Programmatic Supplemental Environmental Impact Statement. Juneau, AK, National Marine Fisheries Service, Alaska Region.
- NOAA Fisheries (2005a). Species Information, Marine and Anadromous Fish: Pacific Coast Fish Species, NOAA Fisheries, Office of Protected Resources. 2005.
- NOAA Fisheries (2005b). Steller Sea Lion Critical Habitat and No-Entry Zones. Critical Habitat (50 CFR 226.202) Tables 1 and 2, NOAA Fisheries, NMFS, Protected Resources. 2005.
- Nokleberg, W., T. K. Bundtzen, et al. (1987). "Significant Metalliferous Lode Deposits and Placer Districts of Alaska." USGS Bulletin 1786: 104.
- Nokleberg, W., T. K. Bundtzen, et al. (1994a). Metallogenic Map of Significant Metalliferous Lode Deposits and Placer Districts in Alaska. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: Plate 11, scale 1:2,500,000.
- Nokleberg, W. J., G. Plafker, et al. (1994b). Geology of South-Central Alaska. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: 311-366.
- North, M. R. (1994). Yellow-billed Loon (*Gavia adamsii*). The Birds of North America, No. 121. A. Poole and F. Gill. Washington, D.C., The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union.
- Northern Dynasty Minerals Ltd. (2005). Developing a Gold-Copper-Molybdenum Giant: Pebble Project, Alaska, PowerPoint Presentation.
- Northern Economics Inc. (2004). Summer 2002: Secondary Arrival Report, Prepared for the State of Alaska, DCED.
- Nowacki, G. and T. Brock (1995). Ecoregions and Subregions of Alaska, EcoMap Version 2.0 (map). Juneau, AK, USFS Alaska Region.
- Nowacki, G., P. Spencer, et al. (2001). Ecoregions of Alaska, USGS.
- Nowacki, G., P. Spencer, et al. (2002). Unified Ecoregions of Alaska, USGS: Open-File Report 02-297, scale 1:4,000,000.

- NPS (1985). Katmai National Park and Preserve General Management Plan, Land Protection Plan and Wilderness Suitability Review, Revised Draft. Anchorage, AK, USDOI, NPS: 170.
- NPS (1996). Klondike Gold Rush National Historic Park General Management Plan/Development Concept Plan and Environmental Impact Statement. Skagway, AK, USDOI, NPS, Klondike Gold Rush National Historic Park.
- NPS (1998). An Introduction to Wild and Scenic Rivers. J. Haubert. Washington, D.C.: 9.
- NPS (1999). The Alaska Journey: One-Hundred and Fifty Years of the Department of the Interior in Alaska. Anchorage, AK: 41-47.
- NPS (2001). Off-Road Vehicle Use in Alaska National Park System Units, NPS, Alaska Region: 29.
- NPS (2003a). Draft Denali National Park Backcountry Management Plan and General Management Plan Amendment and Environmental Impact Statement. Denali Park, AK, USDOI, NPS, Denali National Park and Preserve.
- NPS (2003b). Environmental Assessment: Flood Damage Remediation at Sheep Camp. Skagway, AK, USDOI, NPS, Klondike Gold Rush National Historic Park: 52.
- NPS (2003c). Vessel Quotas and Operating Requirements Final Environmental Impact Statement. Gustavus, AK, USDOI, NPS, Glacier Bay National Park and Preserve, Alaska.
- NPS (2003d). Preamble to the Superintendent's Compendium 2003: Glacier Bay National Park and Preserve. March 24, 2003, NPS, Glacier Bay National Park and Preserve: 32.
- NPS (2003e). Preamble to the Superintendent's Compendium 2003: Katmai National Park and Preserve. Katmai, Aniakchak, and Alagnak, AK, NPS, Katmai National Park and Preserve: 24.
- NPS (2003f). Preamble to the Superintendent's Compendium 2003: Kenai Fjords National Park. Soldonta, AK, NPS, Kenai Fjords National Park: 37.
- NPS (2003g). Preamble to the Superintendent's Compendium 2003: Klondike Gold Rush National Historic Park. Skagway, AK, NPS, Klondike Gold Rush National Historic Park: 19.
- NPS (2003h). Preamble to the Superintendent's Compendium 2003: Lake Clark National Park and Preserve, NPS, Lake Clark National Park and Preserve: 18.
- NPS (2004a). Wrangell-St. Elias National Park and Preserve, Wrangell-St. Elias National Park and Preserve. 2004.
- NPS (2004b). Klondike Natural Resources. 2004.
- NPS (2004c). Glacier Bay. 2004.
- NPS (2004d). Sitka National Historical Park. 2004: Home, Facts, In Depth.
- NPS (2004e). Lake Clark National Park and Preserve. 2004.

- NPS (2004f). Kenai Fjords. 2004.
- NPS (2004g). Aniakchak National Monument and Preserve. 2004.
- NPS (2004h). Katmai National Park and Preserve. 2004.
- NPS (2004i). Aleutian World War II National Historic Area. 2004.
- NPS (2004j). Alagnak Wild River. 2004.
- NPS (2004k). Alaska Maritime National Wildlife Refuge. 2004.
- NPS, Ed. (2005). Interior Secretary Norton Announces the Designation of 24 Sites Important to the Nation's History as National Historic Landmarks. National Park Service News Release. Washington, DC.
- NRCS (1996). Soil Quality Indicators: Organic Matter. Soil Quality Information Sheet Series, USDA, NRCS National Soil Survey Center in Cooperation with the NRCS Soil Quality Institute, and the ARS National Soil Tilth Lab.
- NRCS (2004). National Program Rewarding Conservation Comes to Alaska: Farmers in Lower Kenai Eligible to Apply. USDA NRCS News Release. Palmer, USDA, NRCS.
- NRCS (2005a). Prime and Important Farmlands, USDA, NRCS. 2005.
- NRCS (2005b). Criteria for Soils of Local Importance within the Palmer, Wasilla, and Upper Susitna Soil and Water Conservation Districts, Alaska, USDA, NRCS.
- NRHP (2005). National Register of Historic Places. 2005.
- O'Clair, R. M., R. H. Armstrong, et al. (1997). The Nature of Southeast Alaska: A Guide to Plants, Animals, and Habitats. Seattle, WA, Alaska Northwest Books.
- Office of Governor Murkowski (2004). Governor Welcomes Decision in Area M. Juneau, AK, Home Page News Release No. 04-142. 2005.
- Ohio State University (2005). Conservation Easements. Factsheet Extension. 2005.
- Olson, D. F. (1969). Alaska Reindeer Herdsmen: A Study of Native Management in Transition. Fairbanks, AK, Institute of Social, Economic, and Government Research, University of Alaska.
- Olson, W. M. (1991). Tlingit: An Introduction to their Culture and History. Auke Bay, AK, Heritage Research.
- Olson-Rutz, K., C. Marlow, et al. (1996). "Packstock Grazing Behavior and Immediate Impact on a Timberline Meadow." Journal of Range Management 49(6): 541-545.
- Paige, A. W. and R. J. Wolfe (1997). The Subsistence Harvest of Migratory Birds in Alaska: Compendium and 1995 Update. Juneau, AK, ADF&G.
- Panciera, M. T. (1995). Factors Affecting Cold Hardiness Development. Crop Production and Soil Management Series. Fairbanks, AK, UAF Cooperative Extension Service: 12.

- Parson, E. A., L. Carter, et al. (2001). Potential Consequences of Climate Variability and Change for Alaska (Chapter 10). Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change. U.G. Global Change Program and National Assessment Synthesis Team. Cambridge, UK, Cambridge University Press: 620.
- Payne, P. M. (2003). Ring of Fire (ROF) Resource Management Plan, List of Threatened and Endangered Species. S. D. Henri R. Bisson, BLM. Anchorage, AK, USDOI, NOAA, NMFS.
- Peltz, L. (2005). Marine Habitat Resource Specialist: email correspondence re: EFH for the BLM Ring of Fire planning area.
- Perry, D. A. (1994). Forest Ecosystems. Baltimore, MD, The Johns Hopkins Press Ltd. London.
- Person, D. K., M. Kirchoff, et al. (1996). Alexander Archipelago Wolf: A Conservation Assessment, General Technical Report PNW-GTR-384, USFS: 42.
- Petroleum News (2003). "Evergreen's Alaska Wells Not Commercial." Petroleum News 8(45).
- Petrula, M. J. and T. C. Rothe (2003). Migration Chronology, Routes and Winter and Summer Range of the Pacific Flyway Population of Lesser Sandhill Cranes. Alaska Wildlife Research Publications. Anchorage, AK, ADF&G, Division of Wildlife Conservation.
- Pewe, T. L. (1975). Quaternary Geology of Alaska. U.S. Geological Survey Professional Paper 835: 135p.
- Piatt, J. F. and R. G. Ford (1993). Distribution and Abundance of Marbled Murrelets in Alaska. Anchorage, AK, USFWS Alaska Fish and Wildlife Research Center.
- Piatt, J. F. and N. L. Naslund (1995). Abundance, Distribution, and Population Status of Marbled Murrelets in Alaska. Ecology and Conservation of the Marbled Murrelet, General Technical Report PSW-GTR-152. C. J. Ralph, G. Hunt, M. Raphael and J. F. Piatt, USFS.
- Piatt, J. F., N. L. Naslund, et al. (1999). "Discovery of a New Kittlitz's Murrelet Nest: Clues to Habitat Selection and Nest-site Fidelity." Northwestern Naturalist 80: 8-13.
- Pitcher, K. W. and D. G. Calkins (1981). "Reproductive Biology of Steller Sea Lions in the Gulf of Alaska." Journal of Mammology 62: 599-605.
- Plafker, G. and H. C. Berg (1994). Introduction. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, Geology of Alaska: 1-16.
- Plafker, G., L. M. Gilpin, et al. (1993). Neotectonic Map of Alaska. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: Plate 12, scale 1:2,500,000.
- Plafker, G., S. E. Moore, et al. (1994). Geology of the Southern Alaska Margin. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: 389-449.

- Plant Conservation Alliance (2004). Alien Plant Invaders of Natural Areas Fact Sheets, PCA, BLM, 1849 C Street NW, LSB-204, Washington, DC 20240. 2004.
- Porhola, S. (2004a). Oral communication.
- Porhola, S. (2004b). Oral communication.
- Post, A. and L. R. Mayo (1971). Glacier Dammed Lakes and Outburst Floods in Alaska. USGS Hydrologic Investigations Atlas: 10.
- Prepared under the direction of the American Geological Institute (1974). Dictionary of Geological Terms. Garden City, NY.
- Prevention Institute (2005). Prevention Institute Home Page. Oakland, CA. 2005.
- Pritchard, P. C. H. (1982). "Nesting of the Leatherback Turtle, *Dermochelys coriacea*, in Pacific Mexico, with a New Estimate of the World Population Status." Copeia 1982: 741-747.
- Quinlan, S. E. and J. H. Hughes (1990). "Location and Description of a Marbled Murrelet Tree Nest Site in Alaska." Condor 92: 1068-1073.
- Racine, C. H. and G. M. Ahlstrand (1985). Response of Tussock-Shrub Terrain to Experimental All-terrain ehicle Tests in Wrangell-St. Elias National park and Preserve, Alaska: A Progress Report. Anchorage, Alaska, U.S. Department of the Interior, National Park Service, Alaska Regional Office.
- Redman, E. C., K. M. Maas, et al. (1988). Juneau Gold Belt Subarea. Bureau of Mines Mineral Investigations in the Juneau Mining District, Alaska, 1984-1988. USBOM, Special Publication by USBOM, Juneau Branch, Alaskan Field Operations Center. Volume 2 - Detailed Mine, Prospect, and Mineral Occurrence Descriptions, Section D: 424.
- Reed, A., D. H. Ward, et al. (1998). Brant (*Branta bernicla*). Birds of North America, No. 337. A. Poole and F. Gill. Philadelphia, PA, The Birds of North America, Inc.
- Reed, P. B. (1988). National List of Vascular Plant Species that Occur in Wetlands: Alaska (Region A), USFWS.
- Reger, D. and A. Boraas (1996). An Overview of the Radiocarbon Chronology in Cook Inlet Prehistory. Adventures Through Time: Readings in the Anthropology of Cook Inlet, AK, Anchorage, AK, Cook Inlet Historical Society.
- Reger, R. D. and D. S. Pinney (1996). Late Wisconsin Glaciation of the Cook Inlet Region with Emphasis on the Kenai Lowland and Implications for Early Peopling. Adventures Through Time: Readings in the Anthropology of Cook Inlet, Alaska, Anchorage, AK, Cook Inlet Historical Society.
- Reger, R. D. and D. S. Pinney (1997). Last Major Glaciation of Kenai Lowland. 1997 Guide to the Geology of the Kenai Peninsula, Alaska. S. M. Karl, T. J. Ryherd and N. R. Vaughn. Anchorage, AK, Alaska Geological Society: 18-27.
- Reiger, S., D. B. Schoephorster, et al. (1979). Exploratory Soil Survey of Alaska, U.S. Department of Agriculture, Soil Conservation Service: 213.

- Reimchen, T. E. and S. Douglas (1984). "Feeding Schedule and Daily Food Consumption in Red-throated Loons (*Gavia stellata*) over the Prefledgling Period." Auk 101: 593-599.
- Rejmanek, M. and J. M. Randall (1994). "Invasive Alien Plants in California: 1993 Summary and Comparison with other Areas in North America." Madrono 41(3): 161-177.
- Resource Data Inc., Alaska Earth Sciences Inc., et al. (1995). Mineral Terrane and Known Mineral Deposit Areas, USBOM: 5 pp. metadata plus ARC/INFO database.
- Rice, D. D. (1996). Geologic Framework and Description of Coalbed Gas Plays. Digital map data, text, and graphical images in support of the 1995 National Assessment of United States Oil and Gas Resources. W. R. Beeman, R. C. Obuch and J. D. Brewton, USGS Digital Data Series DDS-35, one CD-ROM.
- Rice, D. W. (1998). "Marine Mammals of the World: Systematics and Distribution." The Society for Marine Mammalogy Special Publication 4: 231.
- Ricketts, T. H., E. Dinerstein, et al. (1999). Terrestrial Ecoregions of North America: A Conservation Assessment. Washington D.C., Island Press.
- Ridder, C. (1996). Up Jim Creek into a Post-Apocalyptic Nightmare, Tweak. 2004.
- Roni, P., L. A. Weitkmap, et al. (1999). Identification of Essential Fish Habitat for Salmon in the Pacific Northwest: Initial Efforts, Information Needs, and Future Direction *In*: L. Benaka, editor. Fish Habitat: Essential Fish Habitat and Rehabilitation. American Fisheries Society, Symposium 22. Bethesda, MD.: Pages 98-107.
- Roppell, P. (2001). Fortunes from the Earth: A History of the Base and Industrial Minerals of Southeast Alaska, Sunflower University Press.
- Rosenberg, D., S. Patten, et al. (1994). Harlequin Duck. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Rosenberg, D. and T. C. Rothe (1994). Swans. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Ross, D. W., G. E. Daterman, et al. (2001). Forest Health Restoration in Southcentral Alaska: A Problem Analysis. Portland, OR, USDA, USFS, Pacific Northwest Research Station: 38.
- Rothe, T. C. (1994). Geese. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Rugh, D. J., M. M. Muto, et al. (1999). Status Review of the Eastern North Pacific Stock of Gray Whales, USDOC: 96.
- Rupp, T. S., F. S. Chapin III, et al. (2001). "Modelling the Influence of Topographic Barriers on Treeline Advance at the Forest-tundra Ecotone in Northwestern Canada." Climatic Change 48: 399-416.
- Rutledge, F. A., R. L. Thorne, et al. (1953). Preliminary Report: Nonmetallic Deposits Accessible to the Alaska Railroad as Possible Sources of Raw Materials for the Construction Industry, USBOM: 129.

- Sauer, J. R., J. E. Hines, et al. (2004). The North American Breeding Bird Survey, Results and Analysis 1966-2003. Laurel, MD, U.S. Patuxent Wildlife Research Center.
- Schick, R. S. and D. L. Urban (2000). "Spatial Components of Bowhead Whale (*Balaena mysticetus*) Distribution in the Alaska Beaufort Sea." Canadian Journal of Fisheries and Aquatic Sciences 57: 2193-2200.
- Schneider, K. (1994). Sea Otter. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Schoen, J. W. and M. Kirchoff (1982). Habitat Use by Mountain Goats in Southeast Alaska. Juneau, AK, ADF&G, Federal Aid in Wildlife Restoration Project: 67.
- Schroeder, R. F., D. B. Anderson, et al. (1987). Subsistence in Alaska: Arctic, Interior, Southcentral, Southwest and Western Regional Summaries. Juneau, AK, ADF&G, Division of Subsistence.
- Schroeder, R. F. and M. Kookesh (1990). Subsistence Harvest and Use of Fish and Wildlife Resources and the Effects of Forest Management in Hoonah, AK. Juneau, AK, ADF&G, Division of Subsistence.
- Schuster, A. M. H. (1999a). Who's Buried in the Ice? Archaeology, Archaeological Institute of America.
- Schuster, A. M. H. (1999b). Radiocarbon Dates in for Kwaday Dän Sinchi. Archaeology.
- Schwan, M. (2003). Breeding Birds of Southeast Alaska, ADF&G Wildlife Conservation. 2005.
- Sease, J. L. and C. J. Gudmundson (2002). Aerial and Land-Based Surveys of Steller Sea Lions (*Eumetopias jubatus*) from the Western Stock in Alaska, June and July 2001 and 2002, U.S. DOC: 45.
- Sease, J. L., W. P. Taylor, et al. (2001). Aerial and Land-based Surveys of Steller Sea Lions (*Eumetopias jubatus*) in Alaska, June and July 1999 and 2000, U.S. DOC: 52.
- Seifert, R. D. (2000). Concepts for Integrating PV into Rural Alaskan Housing and Utilities. Fairbanks, AK, UAF.
- Selkregg, L. L. (1974-1976a). Alaska Regional Profiles - Volume 1: Southcentral, Arctic Environmental Information and Data Center.
- Selkregg, L. L. (1974-1976b). Alaska Regional Profiles - Volume 3: Southwest, Arctic Environmental Information and Data Center.
- Selkregg, L. L. (1974-1976c). Alaska Regional Profiles - Volume 4: Southeast, Arctic Environmental Information and Data Center.
- Sidele, R. C., I. Kamil, et al. (2000). "Stream Response to Subsidence from Underground Coal Mining in Central Utah." Environmental Geology 39(3-4): 279-291.
- Silberling, N. J. (1966). Report on Referred Fossils, West side of Uyak Bay Just South of Town of Uyak in the Kodiak Quadrangle. Alaska Paleontological Database, Field No. 65AMe38, USGS No. USGS Mesozoic loc. M4027, USGS.

- Silberling, N. J., D. L. Jones, et al. (1994). Lithotectonic Terrane Map of Alaska and Adjacent Parts of Canada. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: Plate 3, scale 1:2,500,000.
- Sinclair, E. H. and T. K. Zeppelin (2002). "Seasonal and Spatial Differences in Diet in the Western Stock of Steller Sea Lions (*Eumetopias jubatus*)." Journal of Mammalogy 83(4): 973-990.
- Sinnott, R. (1990). Off-road Vehicles and Hunting in Alaska: A Report to the Alaska Board of Game. Anchorage, Alaska, Alaska Department of Fish and Game, Division of Wildlife Conservation.
- Smith, C. A. (1985). Habitat Use by Mountain Goats in Southeastern Alaska, Final Report. Juneau, AK, ADF&G, Federal Aid in Wildlife Restoration Project: 58 Physical Plant.
- Smith, T. M. and H. H. Shugart (1993). "The Transient Response of Terrestrial Carbon Storage to a Perturbed Climate." Nature(361): 523-526.
- Smith, T. N. (1995). Coalbed Methane Potential for Alaska and Drilling Results for the Upper Cook Inlet Basin. Coalbed Methane Prospects of the Upper Cook Inlet - Field Trip Guidebook, Intergas '95 Conference, Tuscaloosa, AL, ADNR DGGS.
- Society of Wetland Scientists (1998). Palmer Hay Flats, Society of Wetland Scientists. 2004.
- Soil Conservation Service (1982). Floodplain Management Study - Beluga Subbasin Streams. Alaska Rivers Cooperative Study, Susitna River Basin, Beluga Subbasin, USDA and ADNR.
- Solovieva, D. V. (1997). "Steller's Eider: National Report from Russia." Wetlands International Seaduck Specialist Group Bulletin 7: 7-12.
- Solovjova, K. G. and A. A. Vovnyanko (2002). The Fur Rush: Essays and Documents on the History of Alaska at the End of the Eighteenth Century. Anchorage, AK, Phoenix Press.
- Sorden, S. (2002). Quartz. 2004.
- Sowls, A. L., A. L. Hatch, et al. (1978). Catalog of Alaskan Seabird Colonies. Anchorage, AK, USFWS: 254.
- Sparrow, S. D., F. J. Wooding, et al. (1976). The Impact of Off-Road Vehicle Use on Soils and Vegetation on Bureau of Land Managements Lands along the Denali Highway, submitted to Bureau of Land Management, Anchorage, Alaska, Fairbanks, Alaska: Agricultural Experiment Station, University of Alaska Fairbanks.
- Spencer, C. N., K. O. Gabel, et al. (2003). "Wildfire Effects on Stream Food Webs and Nutrient Dynamics in Glacier National Park, USA." Forest Ecology and Management 178: 141-153.
- Spotila, J. R., A. E. Dunham, et al. (1996). "Worldwide Population Decline of *Dermochelys Coriacea*: Are Leatherback Turtles Going Extinct?" Chelonian Conservation and Biology 2(2): 209-222.

- Springer, A. M., J. A. Estes, et al. (2003). Sequential Megafaunal Collapse in the North Pacific Ocean: An On-going Legacy of Industrial Whaling? Proceedings of the National Academy of Sciences.
- Stanek, R. T. (1982). Natural Resource Harvest at Port Graham and English Bay, 1982, An Interim Report. Juneau, AK, ADF&G, Division of Subsistence.
- Stanek, R. T. (1985). Patterns of Resource Use in English Bay and Port Graham, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Stanton, T. W. and G. C. Martin (1912). Lists of Mesozoic Fossils Collected by T.W. Stanton, G.C. Martin, and Party in Southwestern Alaska in 1904. Report on Alaskan Fossils, Division of Alaskan Mineral Resources. Volume 4: 1911-1913: 939-963.
- State of Alaska (2004a). Hydroelectric Power Projects, Regulatory Commission of Alaska. 2005.
- State of Alaska (2004b). Major Road Projects in Kodiak are out to Bid. Kodiak, AK, Alaska State Legislature's Majority Organization. 2005.
- State of Alaska (2005). Proposed Statement of Services Newhalen River Bridge Geophysical Survey, Bridge No. 1286. Anchorage, AK.
- Stearns, M. L. (1990). Haida since 1960. Handbook of North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 7: Northwest Coast.
- Stephenson, B. (1994). Wolf. Wildlife Notebook Series. R. Boertje. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Still, C., P. E. Bittenbender, et al. (2002). Mineral Assessment of the Stikine Area, Central Southeast Alaska, BLM-Alaska: 560.
- Stockdale, D. (2002). The Setting and Planning Background, Chugach National Forest. Anchorage, Supervisor's Office.
- Stratton, L. (1990). Resource Harvest and Use in Tatitlek, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Stratton, L. and E. B. Chisum (1986). Resource Use Patterns in Chenega, Western Prince William Sound: Chenega in the 1960s and Chenega Bay 1984-1986. Juneau, AK, ADF&G, Division of Subsistence.
- Swanston, D. N. (1998). Overview of Controlling Stability Characteristics of Steep Terrain in Southeast Alaska; with Recommendations for Revising and Standardizing Mass Movement Hazard Indexing on the Tongass National Forest. Juneau, AK, USFS Region 10: 24.
- Swenson, R. F. (1997). Introduction to Tertiary Tectonics and Sedimentation in the Cook Inlet Basin. 1997 Guide to the Geology of the Kenai Peninsula, Alaska. S. M. Karl, T. J. Ryherd and N. R. Vaughn. Anchorage, AK, Alaska Geological Society: 18-27.
- Szumigala, D. J., R. C. Swainbank, et al. (2002). Alaska's Mineral Industry 2002, ADNRS DGGS.
- Tae, K. (1997). Proceedings of a Workshop, Fairbanks, AK, UAF.

- Terres, J. K. (1980). The Audubon Society Encyclopedia of North American Birds. New York, NY.
- The Associated Press (2001). Herbicide Plan Opposed by Tribal Groups. Peninsula Clarion.
- The Associated Press (2002). Landslide Triggers Flood; 25 Dyea Residents Evacuate. Anchorage Daily News. Anchorage, AK.
- The Associated Press (2005). Plan to Store Gas in Refuge Gains Support. Anchorage Daily News. Anchorage, AK.
- The Secretary of the Interior (2003). Letter to Senator Ted Stevens. T. H. T. Stevens. Washington, D.C., The Secretary of the Interior: Letter from the Wilderness Society regarding wilderness review in Alaska.
- Tieszen, L. L., Ed. (1978). Vegetation and Production Ecology of an Alaskan Arctic Tundra. New York, Springer-Verlag New York Inc.
- Tove, M. H. (1988). "Observations of Asiatic Migrants in the Western Aleutians." Journal of Field Ornithology 59(2): 101-208.
- Townsend, J. B. (1981). Tanaina. Handbook of North American Indians. J. Helm and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 6: Subarctic.
- Tranel, J. (2003). Alaska Region, USDOl, NPS. 2004.
- Travel Industry Association (2004). Explore Southcentral Alaska Attractions, Travel Alaska.com. 2005.
- Trimble, S. W. and A. C. Mendel (1995). "The Cow as a Geomorphic Agent - A Critical Review." Geomorphology(13): 233-253.
- Turner, D. L., R. B. Forbes, et al. (1980). Geothermal Energy Resources of Alaska: University of Alaska Fairbanks Geophysical Institute Report UAG-R 279, 19 p., 3 sheets, scale 1 at 1:2,500,000.
- Tyler, R., A. R. Scott, et al. (2000). Coalbed Methane Potential and Exploration Targets for Rural Alaska Communities, ADNRR DGGS: 177.
- Tysdal, R. G. and J. E. Case (1979). Geologic Map of the Seward and Blying Sound Quadrangles, Alaska, USGS: Misc. Investigation Series Map I-1150, 12 p.
- U.S. Army Alaska (1998). Integrated Natural Resources Management Plan, 1998-2003, Volume 2 - Fort Richardson, 1998, U.S. Army Alaska.
- U.S. Army Alaska (2004a). Draft Environmental Impact Statement for the Construction and the Operation of a Battle Area Complex and a Combined Arms Collective Training Facility within U.S. Army Training Lands in Alaska. Fort Richardson, Alaska, Department of the Army, United States Army Garrison, Alaska.
- U.S. Army Alaska (2004b). Finding of No Significant Impact from the Environmental Assessment for Installation Fencing. Fort Richardson, Alaska, Department of the Army, United States Army Garrison.

- U.S. Army Corps of Engineers Alaska District (1980). Management of Off Road Vehicle Use, Fort Richardson, Alaska : A Background Study, Fort Richardson, Alaska: United States Army Corps of Engineers, Alaska District.
- U.S. Bureau of Reclamation (1995). Reclamation Manual/Policy CMP P01: Floodplain Management, USDOL, U.S. Bureau of Reclamation. 2004.
- U.S. Census Bureau (1990). Your Gateway to Census 1990, U.S. Census Bureau, Information & Research Services. 2005.
- U.S. Census Bureau (2000). Your Gateway to Census 2000, U.S. Census Bureau, Information & Research Services. 2005.
- U.S. Census Bureau (2003). Alaska Fact Sheet: Census 2000 Demographic Profile Highlights, U.S. Census Bureau. 2005.
- U.S. Census Bureau (2005). Alaska QuickFacts, U.S. Census Bureau, Information & Research Services. 2005.
- UAF (2005). Other Geologic Hazards in Alaska - Avalanches. Alaska Sea Grant. 2005.
- University of Minnesota (2001). Effects of Agriculture Near Water: Short Answers to Frequently Asked Questions About the Impact of Agriculture Practices on Lakes and Rivers. Minnesota Shoreland Management Resource Guide, University of Minnesota.
- USACE (1980). Management of Off Road Vehicle Use, Fort Richardson, Alaska: A Background Study. S. L. Vannice, USACE Alaska District.
- USACE (1995). Corps of Engineers Alaska District Navigable Waters (in addition to all tidal waters), USACE Alaska District. 2004.
- USACE (2004a). Do I need a permit?, USACE Regulatory Program, Alaska District. 2004.
- USACE (2004b). Formerly Used Defense Sites (FUDS) Program Policy. ER 200-3-1.
- USACE (2004c). Floodplain Management Services, USACE Civil Works Branch. 2004.
- USAF (2003). Five-Year Review: Second Five-Year Review Report, Final Report. Environmental Restoration Program. Anchorage, AK, USAF, Elmendorf Air Force Base: 261.
- USAF (2004). 4th Quarter 2004 Quarterly Progress Report. Environmental Restoration Program. Anchorage, AK, USAF, Elmendorf Air Force Base.
- USBOM (1988). Bureau of Mines Mineral Investigations in the Juneau Mining District, Alaska, 1984-1988, Special Publication by USBOM, Juneau Branch, Alaskan Field Operations Center: 3 volumes.
- USBOM (1995). Mineral Availability System/Minerals Industry Location System (MAS/MILS) CD-ROM, Data Dictionary, USBOM Special Publication 12-95: metadata 45 p. plus database.

- USDA (2002). Table 9. 2002 Census of Agriculture Volume 1 Chapter 2: Alaska County Level Data, National Agricultural Statistics Service: Table 9. Harvested Cropland by Size of Farm and Acres Harvested 1997 and 2002.
- USDA and NRCS (2004). The PLANTS Database. Baton Rouge, LA, National Plant Data Center. 2004.
- USDA and USDOl (2003). FY 2002 Performance Report: National Fire Plan.
- USDOl (1981). The Secretary of the Interior. B. o. L. M. Director. Washington, D.C., USDOl, Office of the Secretary: Memorandum regarding Alaska Wilderness Review.
- USDOl (1985). Draft Environmental Impact Statement for the North Aleutian Basin Sale 92., Mineral Management Service, Alaska Outer Continental Shelf Region: III-D-7 to III-D-16.
- USDOl and USDA (1996). Federal Wildland Fire Management Policy and Program Review Implementation Action Plan Report, BLM, USFS, Bureau of Indian Affairs, NPS, USFWS, National Biological Service, and Montana Department of State Lands.
- USDOl, USDA, et al. (2001). Review and Update of the 1995 Federal Wildland Fire Management Policy. Boise, ID, BLM Office of Fire and Aviation and National Interagency Fire Center.
- USDOl and USFWS (1992). Pacific Flyway Management Plan. Portland, OR, USFWS, Office of Migratory Bird Management.
- USDOT and FHWA (2004). Gravina Access Project Record of Decision. Ketchikan, AK: 38.
- USEPA (1990). National Contingency Plan. 55 FR 8845.
- USEPA (1993). Economic Benefits of Effluent Limitation Guidelines for the Offshore Oil and Gas Facilities: Final Report No. EPA 821-R-93-001.
- USEPA (1998). How Nitrogen Oxides Affect the Way We Live and Breathe.
- USEPA (2000a). How Carbon Monoxide Affects the Way We Live and Breathe.
- USEPA (2000b). Abandoned Mine Site Characterization and Cleanup Handbook. Seattle, WA, USEPA Region 10.
- USEPA (2003a). EPA's Draft Report on the Environment 2003. Technical Document. 2005.
- USEPA (2003b). Alaska's Final 2002/2003 Integrated Water Quality Monitoring and Assessment Report.
- USEPA (2003c). National Management Measures to Control Nonpoint Source Pollution from Agriculture.
- USEPA (2004a). "Approval and Promulgation of Implementation Plans: State of Alaska; Anchorage Carbon Monoxide Nonattainment Area; Designation of Areas for Air Quality Planning Purposes, Final Rule." Federal Register 69: 34935.
- USEPA (2004b). How Ground-level Ozone Affects theWay We Live & Breathe.
- USEPA (2005). Global Warming - Polar Region Impacts.

- USEPA (2005a). Superfund Information System, CERCLIS DATABASE. 2005.
- USEPA (2005b). Surf Your Watershed: List of HUC Codes Produced by Search (search for: AK), USEPA. 2005.
- USEPA (2005c). How Particulate Matter Affects the Way We Live & Breathe.
- USFS (1994). Ecological Subregions of the United States, Alaska Region, Compiled by Terry Brock.
- USFS (1997). Tongass National Forest Land and Resource Management Plan Final Environmental Impact Statement. Ketchikan, Alaska, USFS Alaska Region.
- USFS (2000). Silviculture: A Habitat Managment Tool on the Gifford Pinchot National Forest. P. N. Region.
- USFS (2001a). Tongass National Forest, Forest Facts Frequently Asked Questions. 2004.
- USFS (2001b). Helicopter Landing Tours on the Juneau Icefield 2002-2006 Draft Environmental Impact Statement. Juneau, AK, USDA, USFS, Alaska Region.
- USFS (2001c). Wayne National Forest Oil and Gas Leasing Environmental Assessment.
- USFS (2002a). Chugach National Forest Land Management Plan Revision Final Environmental Impact Statement. Anchorage, AK, USDA Forest Service, Chugach National Forest.
- USFS (2002b). Shoreline Outfitter/Guide Analysis. Sitka, AK, USFS, Tongass National Forest. 2005.
- USFS (2003a). Tongass Land Management Plan Final Supplemental Environmental Impact Statement Roadless Area Evaluation for Wilderness Recommendations. Ketchikan, Alaska, USFS Alaska Region.
- USFS (2003b). Forest Health Conditions in Alaska 2003, A Forest Health Protection Report, Division of Forestry.
- USFS (2003c). Environmental Assessment for Seward to Girdwood Iditarod National Historic Trail. Anchorage, AK, USDA, USFS, Region 10, Alaska, Chugach National Forest, Glacier and Seward Ranger Districts: 49.
- USFS (2004a). Tongass National Forest Log Transfer Facility Environmental Cleanup. 2005.
- USFS (2004b). Tongass National Forest Forest Facts: Forest Land Use Statistics. 2005: Information compiled by John Sherrod, Tongass Planning Staff, in March 2002.
- USFS (2004c). Alaska Region, USFS Alaska Region. 2004.
- USFS (2004d). Minerals Categories and Administrative Responsibilities. 2004.
- USFS (2004e). Commerically Guided Helicopter Skiing on the Kenai Peninsula Record of Decision, USDA, USFS, Chugach National Forest, Glacier and Seward Ranger Districts.
- USFS (2004f). Decision Notice and Finding of No Significant Impact Seward to Girdwood Iditarod National Historic Trail. Anchorage, AK, USDA, USFWS, Region 10, Alaska Region, Chugach National Forest, Seward and Glacier Ranger Districts: 15.

- USFS (2004g). Kensington Gold Project Final Supplemental Environmental Impact Statement. Juneau, AK, USDA, USFS, Tongass National Forest.
- USFS (2004h). Alaska Empire Mine, Hawk Inlet, Alaska: Century Mining Corporation 2004 Surface Exploration Plan of Operations: Decision Memo. Juneau, AK, USFS, Tongass National Forest, Juneau Ranger District. 2005.
- USFS (2004i). 2004 Surface Exploration Annual Work Plan: Kennecott Greens Creek Mining Company Greens Creek Mine, Hawk Inlet, Alaska: Decision Memo. Juneau, AK, USFS, Tongass National Forest, Juneau Ranger District. 2005.
- USFS (2004j). Shoreline Outfitter Guide Record of Decision and Final Environmental Impact Statement. Juneau, AK, USDA, USFS, Tongass National Forest.
- USFS (2004k). 2004 Surface Exploration Drilling Avalon Development Corp., Union Bay, Alaska: Decision Memo. Ketchikan, AK, USFS, Tongass National Forest, Ketchikan-Misty Fiords Ranger District. 2005.
- USFS (2004l). Schedules of Proposed Actions, USFS, Tongass National Forest. 2005.
- USFS (2004m). Tuxekan Island Timber Sale(s) Project Draft Environmental Impact Statement. Thorne Bay, AK, USFS, Tongass National Forest, Thorne Bay Ranger District.
- USFS (2004n). Forest Service Manual, National Headquarters (WO) Washington, D.C., FSM 2800 - Minerals and Geology, Amendment No. 2800-2004-2, http://www.fs.fed.us/im/directives/fsm/2800/2800_zero_code.doc.
- USFWS (1985a). Izembek National Wildlife Refuge Final Comprehensive Conservation Plan, Wilderness Review and Environmental Impact Statement.
- USFWS (1985b). Alaska Peninsula National Wildlife Refuge, Final Comprehensive Plan, Environmental Impact Statement and Wilderness Review. Anchorage, AK, USFWS: 426.
- USFWS (1987a). Kodiak National Wildlife Refuge, Final Comprehensive Plan, Wilderness Review, and Environmental Impact Statement. Anchorage, AK, USFWS: 533.
- USFWS (1987b). Birds of Adak Island, Aleutian Islands Unit, Alaska Maritime National Wildlife Refuge. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page, USFWS: Unpaginated.
- USFWS (1988). Alaska Maritime National Wildlife Refuge, Final Comprehensive Plan, Wilderness Review, and Environmental Impact Statement. Anchorage, AK, USFWS.
- USFWS (1993). Anchorage Wetlands Trends Study (1950 to 1990). Anchorage, AK, USFWS Ecological Services.
- USFWS (1994). Alaska Peninsula/Becharof National Wildlife Refuge Complex Final Public Use Management Plan. Anchorage, AK, USDO, USFWS.
- USFWS (1995). Kenai National Wildlife Refuge Comprehensive Conservation Plan, Environmental Impact Statement, and Wilderness Review.
- USFWS (1997a). National List of Vascular Plant Species that Occur in Wetlands: 1996 National Summary, Ecology Section, National Wetlands Inventory: 209.

- USFWS (1997b). "Final Rule for Threatened Status for the Alaska Breeding Population of the Steller's Eider." Federal Register 62: 31748-31757.
- USFWS (1998). "Proposed Rule to List the Short-tailed Albatross as Endangered in the United States." Federal Register 63: 58692-58701.
- USFWS (1999). Population Status and Trends of Sea Ducks in Alaska. Anchorage, AK, USDOl, USFWS: 137.
- USFWS (2000). "Final Rule Extending the Endangered Status of the Short-tailed Albatross (*Phoebastria albatrus*) to Include the Species' Range within the United States." Federal Register 65: 46643-46654.
- USFWS (2001a). Press release and background information presented on the Alaska website. Anchorage, AK, USFWS. 2005.
- USFWS (2001b). "Final Rule to Remove the Aleutian Canada Goose from the Federal List of Endangered and Threatened Wildlife." Federal Register 66: 15643-15656.
- USFWS (2001c). "Final Determination of Critical Habitat for the Alaska-Breeding Population of Steller's Eider, Final Rule." Federal Register 66: 8849.
- USFWS (2002a). Sea Otter (*Enhydra lutris*): Southeast Alaska Stock. Alaska Marine Mammal Stock Assessments, 2002. R. P. Angliss and K. L. Lodge. Anchorage, AK, NOAA Technical Memorandum NMFS-AFSC-133, USDOC, NOAA, NMFS, Alaska Fisheries Science Center: 230.
- USFWS (2002b). Steller's Eider Recovery Plan. Fairbanks, AK, USFWS.
- USFWS (2002c). Sea Otter (*Enhydra lutris*): Southcentral Alaska Stock. Alaska Marine Mammal Stock Assessments, 2002. R. P. Angliss and K. L. Lodge. Anchorage, AK, NOAA Technical Memorandum NMFS-AFSC-133, USDOC, NOAA, NMFS, Alaska Fisheries Science Center: 230.
- USFWS (2002d). Sea Otter (*Enhydra lutris*): Southwest Alaska Stock. Alaska Marine Mammal Stock Assessments, 2002. R. P. Angliss and K. L. Lodge. Anchorage, AK, NOAA Technical Memorandum NMFS-AFSC-133, USDOC, NOAA, NMFS, Alaska Fisheries Science Center: 230.
- USFWS (2003). Species List - Alaska Peninsula/Becharof NWR. King Salmon, AK, Alaska Peninsula National Wildlife Refuge.
- USFWS (2004a). America's National Wildlife Refuge System: Special Management Areas. 2004.
- USFWS (2004b). "Proposed Rule Listing the Southwest Alaska Distinct Population Segment of the Northern Sea Otter (*Enhydra lutris kenyoni*) as Threatened." Federal Register 69: 6600-6621.
- USFWS (2004c). Becharof National Wildlife Refuge. 2004.
- USFWS (2004d). Kenai National Wildlife Refuge. 2004.
- USFWS (2004e). Kodiak National Wildlife Refuge. 2004.

- USFWS (2004f). Izembek National Wildlife Refuge. 2004.
- USFWS (2004g). Alaska Peninsula National Wildlife Refuge. 2004.
- USFWS (2004h). "Review of Species That Are Candidates or Proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions." Federal Register 69: 24876-24904.
- USFWS (2004i). Wildlife. Kodiak, AK, Kodiak National Wildlife Refuge. 2005.
- USFWS (2004j). Cliff Nesters of St. Lazaria Island. Juneau, AK, Juneau Fish & Wildlife Field Office. 2005.
- USFWS (2005a). Alaska Maritime National Wildlife Refuge. Homer, AK, USFWS - Alaska. 2005.
- USFWS (2005b). Biological Projects: Invasive Species on the Refuge - Historical Background. Adapted from S. Ebbert and V. Byrd. Homer, AK, Alaska Maritime National Wildlife Refuge. 2005.
- USFWS (2005c). Wildlife: Alien/Invasive Mammals of the Aleutian Islands. Homer, AK, Alaska Maritime National Wildlife Refuge. 2005.
- USFWS (2005d). Alaska Maritime National Wildlife Refuge Native Mammals. Homer, AK, Alaska Maritime National Wildlife Refuge.
- USFWS (2005e). Wildlife: Marine Mammals of the Aleutian Islands. Homer, AK, Alaska Maritime National Wildlife Refuge. 2005.
- USFWS (2005f). America's National Wildlife Refuge System. Comprehensive Conservation Planning by Region. Region 7-Alaska. 2005.
- USFWS (2005g). Kodiak National Wildlife Refuge: Wildlife and Fish Facts. Anchorage, AK, USFWS. 2005.
- USFWS (2005h). Alaska Peninsula/Becharof National Wildlife Refuges: Wildlife and Fish Facts. Anchorage, AK, USFWS.
- USFWS (2005i). Kenai National Wildlife Refuge: Wildlife and Fish. Anchorage, AK, USFWS.
- USFWS (2005j). Alaska Maritime National Wildlife Refuge. Wildlife. Fishes, Invertebrates, and Amphibians list. USFWS-Alaska.
- USFWS (2005k). Northern Pike on the Kenai Peninsula. Anchorage, AK, USFWS. 2005.
- USFWS (2005l). Izembek National Wildlife Refuge: Wildlife. Anchorage, AK, USFWS. 2005.
- USFWS (No date). Birds of Izembek National Wildlife Refuge. Jamestown, ND, U.S. Fish and Wildlife Refuge, Northern Prairie Wildlife Research Home Page. 2005: Unpaginated.
- USGS (1995). "1995 National Assessment of United States Oil and Gas Resources." USGS Circular 1118: 20.
- USGS (2001). Seabirds, marine mammals, and forage fish in Glacier Bay National Park. USGS website. 2005: Presentation.

- USGS (2002a). The role of coastal wetlands in Cook Inlet, Alaska as stopover habitat for migratory birds, Alaska Biological Science Center. May 25.
- USGS (2002b). Major Catastrophic Landslides of the 20th Century, USDOI, USGS, National Landslide Information Center. 2005.
- USGS (2004a). The Alaska Resource Data Files. 2004.
- USGS (2004b). National Geochemical Survey - Database and Documentation, USGS: Open-File Report 2004-1001, version 1.0.
- USGS (2004c). Hydrologic Unit Maps, USDOI, USGS, Water Webserver Team. 2005: Adapted from Seaber, P.R., Kapinos, F.P., and Knapp, G.L. 1987. Hydrologic Unit Maps: USGS Water-Supply Paper 2294, 63 p.
- USGS (2004d). Floods on the Kenai Peninsula, Alaska, October and November 2002. Kenai, AK, USDOI, USGS. 2005: Fact Sheet 2004-3023.
- USGS (2004e). Status of Listed Species and Recovery Plan Development: Aleutian shield fern (*Polystichum aleuticum*) Endangered, Alaska, USGS, Northern Prairie Wildlife Research Center. 2005.
- USGS (2005). Status of Listed Species and Recovery Plan Development: Aleutian Shield-fern, *Polystichum aleuticum* -- Endangered, Alaska, USGS Northern Prairie Wildlife Research Center. 2005.
- Utah-BLM (2004). Fact Sheet Resolution of RS2477 Right-of-Way Claims. 2005.
- Utah-BLM (2005). Utah Bureau of Land Management Home Page. Salt Lake City, UT, BLM Utah State Office. 2005.
- Valkenburg, P. and M. A. Keech (2002). Population Dynamics of Interior and Southwest Caribou Herds, 1 July 2001-30 June 2002. Juneau, AK, ADF&G Division of Wildlife Conservation.
- Valkenburg, P., M. A. Keech, et al. (2002). Investigation of Regulating and Limiting Factors in the Delta Caribou Herd. Juneau, AK, ADF&G Division of Wildlife Conservation: 98.
- Vallier, T. L., D. W. Scholl, et al. (1994). Geologic Framework of the Aleutian Arc, Alaska. The Geology of North America. G. Plafker and H. C. Berg. Boulder, CO, Geological Society of America. Volume G-1, The Geology of Alaska: 367-388.
- Van Pelt, T. I. and J. F. Piatt (2003). Population status of Kittlitz's and Marbled Murrelets and surveys for other marine bird and mammal species in the Kenai Fjords area, Alaska. Anchorage, AK, Annual report to USFWS, USGS Science Support Project, Alaska Science Center.
- VanderHoek, R. (2004). Tangle Lakes Archaeology Survey Project Report. Anchorage, AK, Presented at the State Historic Preservation Officer's Section 106 Informational Meeting, Loussac Library.
- VanStone, J. W. (1984). Exploration and Contact History of Western Alaska. Handbook of North American Indians. D. Damas and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 5: Arctic.

- Veltre, D. and M. J. Veltre (1982). Resource Utilization in Unalaska, Aleutian Islands, Alaska. Juneau, AK, ADF&G, Division of Subsistence.
- Viereck, L. A. (1983). The effects of fire in black spruce ecosystems of Alaska and northern Canada. The role of fire in northern circumpolar ecosystems. R. W. D. A. M. Wein. New York, John Wiley & Sons Ltd. Chapter 11: 201-220.
- Viereck, L. A., C. T. Dyrness, et al. (1992). The Alaska Vegetation Classification. Portland, OR, USFS, Pacific Northwest Research Station: 278.
- Viereck, L. A. and E. L. Little (1972). Alaska Trees and Shrubs. Washington, D.C., USDA, USFS.
- Wahrhaftig, C. (1965). Physiographic Divisions of Alaska, USGS: Professional Paper 482.
- Warfield, R. S. (1962). Some Nonmetallic Mineral Resources for Alaska's Construction Industry. U.S. Bureau of Mines Investigations 6002, U.S. Bureau of Mines.
- Watkins, W. A., M. A. Daher, et al. (2000). "Seasonality and distribution of whale calls in the North Pacific." Oceanography 13(1): 62-67.
- Watson, R. T. and Core Writing Team (2001). IPCC Third Assessment Report: Climate Change 2001: Synthesis Report. United Kingdom, Cambridge University Press.
- Webnox Corporation (2005). Hyperdictionary. 2005:
<http://www.hyperdictionary.com/dictionary/quality+of+life>.
- Weeks, D. P. (2003). Lake Clark National Park and Preserve, Alaska, Water Resources Scoping Report, Draft Technical Report. Denver, CO, USDO, NPS, Water Resources Division.
- Weidmer, M. (2002). Lower Kenai Peninsula Summer Off-Road Vehicle Trail Stream Crossings, Draft Report. Anchorage, AK, ADF&G Habitat Restoration Division.
- Western Area Power Administration (2003). "DOI/DOE report evaluates renewable energy resources on public land." Energy Services Bulletin 22(3).
- Western Hemisphere Shorebird Reserve Network (2005). Western Hemisphere Shorebird Reserve Network Homepage. Manomet, MA, Manomet Center for Conservation Sciences. 2005.
- Whelan, R. J. (1995). The ecology of fire. New York, NY, Cambridge University Press.
- Wilbur, A. R. and M. W. Pentony (1999). Human-Induced Nonfishing Threats to Essential Fish Habitat in the New England Region. *In*: L. Benaka, editor. Fish Habitat: Essential Fish Habitat and Rehabilitation. American Fisheries Society, Symposium 22. Bethesda, MD: Pages 299-321.
- Wilderness.net (2005). The National Wilderness Preservation System: Aleutian Islands Wilderness, Wilderness.net. 2005.
- Wildland Fire Lessons Learned Center (2003). The Winning Series: Alaska. 2005.

- Williams, J. (2002). Mammals of the Aleutian Islands Unit. Homer, AK, Alaska Maritime National Wildlife Refuge. 2005.
- Wilmot, R. (2004). Litterbugs Inspire Bureaucracy: Comment. Anchorage Daily News.
- Wittwer, D. (2004). Forest Health Conditions in Alaska - 2003. Anchorage, AK, USFS: 78.
- Wohletz, K. and G. Heiken (1992). Volcanology and Geothermal Energy. Berkeley, CA, University of California Press.
- Wolfe, R. J. and M. Pete (1984). Use of Caribou and Reindeer in the Andreafsky Mountains. Bethel, AK, ADF&G, Division of Subsistence.
- Wolfe, R. J. and R. J. Walker (1987). "Subsistence Economies in Alaska: Productivity, Geography, and Development Impacts." Arctic Anthropology 24(2): 56-81.
- Workman, K. W. (1996a). An Archaeological Definition of Dena'ina. Adventures Through Time: Readings in the Anthropology of Cook Inlet, Alaska, Anchorage, AK, Cook Inlet Historical Society.
- Workman, W. (1996b). Human Colonization of the Cook Inlet Basin Before 3,000 Years Ago. Adventures Through Time: Readings in the Anthropology of Cook Inlet, Alaska, Anchorage, AK, Cook Inlet Historical Society.
- Worl, R. (1990). History of Southeast Alaska Since 1867. Handbook of North American Indians. W. Suttles and W. Sturtevant. Washington, D.C., Smithsonian Institution. Volume 7: Northwest Coast.
- Wright, J. (1994). Peeps and Related Sandpipers. Wildlife Notebook Series. Anchorage, AK, ADF&G. 2005: Revised and reprinted 1994.
- Wright, J. M., J. Morris, et al. (1985). Bristol Bay Regional Subsistence Profile. Dillingham, AK, ADF&G, Division of Subsistence.
- Znamenski, A. A. (2003). Through Orthodox Eyes: Russian Missionary Narratives of Travels to the Dena'ina and Ahtna, 1850s-1930s. Rasmuson Library Historical Translation Series Number 13. Fairbanks, AK, University of Alaska.

This page intentionally left blank.