

## **Appendix I**

### **Section 810 Analysis**



**TABLE OF CONTENTS**

	<b>Page</b>
A. Subsistence Evaluation Factors .....	I-4
B. ANILCA Section 810(a) Evaluations and Findings for All Alternatives and the Cumulative Case .....	I-5
B.1 Evaluation and Findings for Alternative A (No Action Alternative).....	I-5
B.1.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved .....	I-6
B.1.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes .....	I-6
B.1.4 Findings .....	I-7
B.2 Evaluation and Findings for Alternative B (Resource Development Alternative).....	I-7
B.2.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs.....	I-7
B.2.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved .....	I-8
B.2.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes .....	I-8
B.2.4 Findings .....	I-8
B.3 Evaluation and Findings for Alternative C (Resource Conservation Alternative).....	I-9
B.3.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs.....	I-9
B.3.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved .....	I-10
B.3.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes .....	I-10
B.3.4 Findings .....	I-10
B.4 Evaluation and Findings for Alternative D (Preferred Alternative).....	I-10
B.4.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs.....	I-11
B.4.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved .....	I-11
B.4.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes .....	I-12
B.4.4 Findings .....	I-12
B.5 Evaluation and Findings for the Cumulative Case.....	I-12
B.5.1 Evaluation of the Effect of Such Use, Occupancy, or Disposition on Subsistence Uses and Needs.....	I-13
B.5.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved .....	I-14
B.5.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes .....	I-15
B.5.4 Findings .....	I-15
C. Notice and Hearings.....	I-15
D. Subsistence Determinations Under ANILCA Section 810(a)(3)(A), (B), and (C) .....	I-15

## ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Land Conservation Act
BLM	Bureau of Land Management
CBNG	coalbed natural gas
CNF	Chugach National Forest
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
NEPA	National Environmental Policy Act
NPS	National Park Service
OHV	Off-Highway Vehicle
RFFA	reasonably foreseeable future action
RMP	Resource Management Plan
ROP	Required Operating Procedure
ROW	right-of-way
SRMA	Special Recreational Management Area
TNF	Tongass National Forest
U.S.	United States
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WSR	Wild and Scenic River

# ANILCA SECTION 810 ANALYSIS OF SUBSISTENCE IMPACTS

Section 810(a) of the Alaska National Interest Land Conservation Act (ANILCA) requires that an evaluation of subsistence uses and needs be completed for any federal determination to “withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands.” The Bureau of Land Management (BLM) has developed the Ring of Fire Proposed Resource Management Plan and Final Environmental Impact Statement (PRMP/FEIS) to establish broad guidelines for 1.3 million acres of BLM-managed lands in the Southeast, Southcentral, Kodiak Island, and the Alaska Peninsula/Aleutian Chain regions as required under the Federal Land Policy and Management Act (FLPMA) of 1976. In a portion of the planning area, this plan will update the provisions of the Southcentral Management Framework Plan completed in 1980. The BLM Ring of Fire PRMP/FEIS is a federal land management action subject to the requirements of Section 810.

**The Section 810 analysis is developed in tandem with the Final EIS required by National Environmental Policy Act (NEPA).** The Section 810 analysis builds upon the description and analysis of impacts to subsistence uses found throughout the PRMP/FEIS, as subsistence uses were recognized as a highly valued use of resources and lands. A detailed description of the status of important subsistence resources and use patterns is found in Chapter 3, Affected Environment. Then Chapter 4, Environmental Consequences, provides an analysis of the potential environmental effects on subsistence resources and uses, including cumulative impacts, that could result from implementation of the various alternatives. This appendix uses the information presented in the PRMP/FEIS to evaluate the potential impacts to subsistence pursuant to Section 810(a) of ANILCA. While the same data on resources and human use patterns is used for both the NEPA review and the Section 810 review, the geographic scope of analysis is not identical. Under NEPA, Chapter 4 analyzes environmental consequences of activities under the PRMP on all BLM-managed lands, whether unencumbered or selected, while the Section 810 analysis applies to unencumbered BLM-managed lands on which the ANILCA federal subsistence priority applies.

The BLM-managed lands in the Ring of Fire planning area include a few comparatively large blocks, and many small parcels widely dispersed across a large portion of Alaska. In total, the 1.3 million acres of BLM-managed lands represent two percent of the 61.4 million acres of land within the planning area (see Table 1). In addition, some 62 percent of the BLM-managed lands, amounting to 798,427 acres, are selected by the State of Alaska or Alaska Native corporations, and much of which will be conveyed out of BLM long-term management. Moreover, these selected lands are outside the jurisdiction of the federal subsistence management program, established in Title VIII of ANILCA. A total of 485,902 acres, or 38 percent of the BLM-managed lands, are unencumbered by other selections and are subject to the Federal rural subsistence priority. This Section 810 Analysis focuses on those 485,902 acres of unencumbered BLM-managed lands on which the federal rural subsistence priority applies.

**Table 1. Acres within the Ring of Fire Planning Area by Region**

Planning Region	All Ownerships*	BLM-managed Lands		BLM-managed Land as % of Region
		Unencumbered	Selected	
Alaska Peninsula/Aleutian Chain	15,500,000	28,100	83,587	<1%
Kodiak	3,200,000	2,729	13,796	<1%
Southcentral	21,200,000	453,140	382,614	4%
Southeast	21,500,000	1,933	318,430	1%
Total	61,400,000	485,902	798,427	2%

Notes: \* All acres in this column rounded to nearest 100,000.

- 1) Acres summarized are based on geometrically-calculated areas in the general land status geographic information system (GIS) dataset, as subsetted by geoprocessing methods to the Ring of Fire planning area boundary. GIS datasets provided by BLM.

As a first step in analyzing impacts to subsistence uses resulting from this PRMP/FEIS, it is important to examine the proportion of BLM lands included with community subsistence use areas in the four planning regions. The following paragraphs discuss the location and character of the unencumbered BLM-managed lands subject to the federal subsistence priority within the Alaska Peninsula/Aleutian Chain, Kodiak, Southcentral, and Southeast planning regions.

In the Alaska Peninsula/Aleutian Chain region, unencumbered BLM-managed lands total 28,100 acres, or less than 0.2 percent (two tenths of one percent), of the region. Visual inspection of Figure 1.2-2 (Appendix A), Land Ownership Map of Alaska Peninsula and Kodiak Island, demonstrates that only Native-selected lands in this region are of sufficient scale to appear in this display. Thus, the parcels of unencumbered lands are very small and are widely dispersed across a very large region. When community subsistence areas are mapped, and the underlying land status is shown on Figure 3.5-2 (Appendix A), Subsistence Use Areas of the Alaska Peninsula and Kodiak Island, it becomes apparent that the communities rely on a very large majority of the total land base of the region for subsistence uses. With a few exceptions, the BLM-managed Native-selected lands fall within these subsistence areas. The notable exceptions are several Native-selected parcels on the north side of the Alaska Peninsula between Herendeen Bay and Izembek Lagoon that fall outside of the mapped subsistence use areas. More specifically for this analysis, the unencumbered BLM-managed lands are small and dispersed to the point that they do not appear on a map at this scale. Thus, it is not possible to precisely analyze the location, the ecological character, nor the specific role these small parcels may play in the seasonal round of subsistence harvests. This information shows that the unencumbered BLM-managed lands make up an exceedingly small portion of the total subsistence use area in this region.

In the Kodiak region, unencumbered BLM-managed lands total 2,729 acres, or less than 0.09 percent (nine hundredths of one percent), of the total land. Visual inspection of Figure 1.2-2 (Appendix A), Land Ownership Map of Alaska Peninsula and Kodiak Island, demonstrates that only three parcels are of sufficient size to appear on the map at this scale. The largest of these is a Native-selected parcel adjacent to Kodiak, south and west of the city. A small parcel of State-selected BLM-managed land is found at the head of Sharatin Bay, south and east of Port Lions. A small parcel of unencumbered BLM-managed land is found further to the southwest of the city of Kodiak. The remaining acreage of unencumbered lands is very small and dispersed across the island. When community subsistence areas are mapped, and the underlying land status is shown in Figure 3.5-2 (Appendix A), Subsistence Use Areas of the Alaska Peninsula and Kodiak Island, it becomes apparent that the communities rely on a band of near shore

waters and coastal lowlands around nearly the entire island, with particularly extensive use of Afognak Island to the north of Kodiak Island. More specifically for this analysis, the unencumbered BLM-managed lands are small and dispersed to the point that they do not appear on a map at this scale. Thus, it is not possible to precisely analyze the location, the ecological character, nor the specific role these parcels may play in the seasonal round of subsistence harvests. This information shows that the unencumbered BLM-managed lands make up an exceedingly small portion of the total subsistence use area in this region.

In the Southcentral region, unencumbered BLM-managed lands total 453,140 acres, or approximately two percent, of the total land in the region. Visual inspection of Figure 1.2-3 (Appendix A), Land Ownership Map of the Southcentral Region, shows that the majority of the unencumbered BLM-managed lands are found in two large parcels at the western boundary of the region in the Neacola Mountains, together representing 372,000 acres, or 82 percent, of the total unencumbered lands in the planning region. Another significant parcel is found on the eastern boundary of the region, northwest of College Fiord, high in the Chugach Mountains and adjacent to the Chugach National Forest (CNF) boundary. Finally, a smaller parcel is found to the west of Redoubt Bay in the vicinity of Harriet Creek. Any remaining acreage of unencumbered lands is very small and dispersed across the region. When community subsistence areas are mapped, and the underlying land status is shown in Figure 3.5-3 (Appendix A), Subsistence Use Areas of the Southcentral Region, it becomes apparent that the communities rely on several broad zones of land. Much of the Kenai Peninsula is used for subsistence purposes, as are the waters of Kachemak Bay and Cook Inlet extending to the western shore from Tuxedni Bay north to the Susitna River. Also on the west side of Cook Inlet, the community use area for the village of Tyonek extends a distance inland to overlap with the eastern portion of the State-selected lands adjacent to the unencumbered BLM-managed lands in the Neacola Mountains. The Tyonek use area, as mapped in the 1980s, does not extend to the unencumbered BLM-managed lands in the Neacola Mountains, although historic trails through these mountains to the inland Dena'ina communities are documented (see discussion of Southcentral regional subsistence patterns in Section 3.5.6.5 in this PRMP/FEIS). The other large blocks of unencumbered BLM-managed lands in the Southcentral region do not fall within mapped subsistence use areas. Any remaining unencumbered BLM-managed parcels are small and dispersed to the point that they do not appear on a map at this scale. Thus, it is not possible to precisely analyze the location, the ecological character, nor the specific role these additional parcels may play in the seasonal round of subsistence harvests. This information shows that the unencumbered BLM-managed lands make up an exceedingly small portion of the total subsistence use area in this region.

In the Southeast region, unencumbered BLM-managed lands total 1,933 acres, or less than 0.009 percent (nine thousandths of one percent), of the total land in the region. Visual inspection of Figure 1.2-4 (Appendix A), Land Ownership Map of the Southeast Region, reveals several large State-selected parcels in the Haines and Skagway area, accounting for nearly all of the 382,614 selected BLM-managed lands in this planning region. The unencumbered BLM-managed lands in the region are concentrated in the Lake Carlanna Municipal Watershed (1,835 acres) located adjacent to Ketchikan (see Figure 2.3-2, Appendix A). Any remaining unencumbered acres, amounting to approximately 100 acres, are dispersed across the planning region. When community subsistence areas are mapped, and the underlying land status is shown in Figure 3.5-4 (Appendix A), Subsistence Use Areas of the Southeast Region, it becomes apparent that the communities employ a large proportion of all lands in the region for subsistence, including the major islands and near shore marine waters, along with limited areas

on the mainland, and a wide range of land in the vicinity of Yakutat in the north of the region. More specifically for this analysis, the unencumbered BLM-managed lands are small and dispersed to the point that they do not appear on a map at this scale. Thus, it is not possible to precisely analyze the location, the ecological character, nor the specific role these parcels may play in the seasonal round of subsistence harvests. This information shows that the unencumbered BLM-managed lands make up an exceedingly small portion of the total subsistence use area in this region.

## **A. Subsistence Evaluation Factors**

Section 810(a) of ANILCA requires that the evaluation of effects on subsistence uses and needs include findings addressing three specific issues:

- The effect of use, occupancy, or disposition on subsistence uses and needs.
- The availability of other lands for the purpose sought to be achieved.
- Other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 United States Code 3120).

The evaluation and findings required by ANILCA Section 810 are set out for each of the four alternatives and the cumulative case considered in the Ring of Fire PRMP/FEIS.

A finding that any of the alternatives may significantly restrict subsistence uses imposes additional requirements, including provisions for notices to the State and appropriate regional and local subsistence committees, a hearing in the vicinity of the area involved, and the making of the following determinations, as required by Section 810(a)(3):

- such a significant restriction of subsistence uses is necessary, and consistent with sound management principles for the utilization of the public lands;
- the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of use, occupancy, or other disposition; and
- reasonable steps will be taken to minimize adverse effects upon subsistence uses and resources resulting from such actions.

To determine if a significant restriction of subsistence uses and needs may result from any one of the alternatives discussed in the Ring of Fire PRMP/FEIS, including their cumulative effects, the following three factors in particular are considered:

- a reduction in the availability of subsistence resources caused by a decline in the population or amount of harvestable resources;
- reductions in the availability of resources used for subsistence purposes caused by alteration of their normal locations and distribution patterns; and
- limitations on access to subsistence resources, including from increased competition for the resources.

A significant restriction to subsistence may occur when the proposed action results in substantial and enduring (e.g., more than localized and temporary) reductions in subsistence resource population abundance, reductions in availability due to displacement of the subsistence resource populations, or reductions in access due to legal or physical barriers or increased competition. Chapter 3, Affected Environment, Section 3.5.6 Subsistence, provides information on areas and resources important for subsistence use, and the degree of reliance of the affected communities on the subsistence resource populations found on, or relying on, the



habitat provided by BLM-managed lands. Additional information on important subsistence resources is found in Sections 3.2.8 Fisheries and Aquatic Habitat, and Section 3.2.9 Wildlife. Chapter 4, Environmental Consequences, provides an assessment, within the constraints of available data, on levels of reductions and limitations under each alternative. Section 4.3.4.2 examines Subsistence uses, Section 4.3.1.4 examines Fisheries and Aquatic Habitat, and Section 4.3.1.5 examines Wildlife. These assessments of effects to subsistence resources and uses were used to determine whether the action may cause a significant restriction to subsistence. The information contained in this PRMP/FEIS is the primary data used in this analysis.

The subsistence evaluation and findings under ANILCA Section 810 must also include a cumulative impacts analysis. Section B.2 of this analysis begins with evaluations and findings for each of the four alternatives discussed in the PRMP/FEIS. Finally, the most intensive cumulative case, as discussed in Section 4.4 Cumulative Effects, is evaluated. This approach helps the reader to separate the subsistence restrictions that would potentially be caused by activities proposed under the four alternatives from those that would potentially be caused by past, present, and future activities that could occur, or have already occurred, in the surrounding area.

## **B. ANILCA Section 810(a) Evaluations and Findings for All Alternatives and the Cumulative Case**

The following evaluations are based on information relating to the environmental and subsistence consequences of implementation of Alternatives A through D, and the cumulative case as presented in Chapter 4, Environmental Consequences, of the Ring of Fire PRMP/FEIS. The stipulations discussed in Chapter 2, Alternatives, and in Appendix D, are also considered for the alternatives to which they apply. The evaluations and findings focus on potential impacts to the subsistence resources themselves, as well as access to the resources.

Timber development, realty actions to grant rights-of-way (ROW), mineral development, off-highway vehicle (OHV) management, and growing recreation, all have the potential to adversely affect subsistence uses (see discussion of direct and indirect effects on subsistence in Chapter 4). However, the extent of these effects depends on the configuration of BLM-managed lands in relation to community subsistence use areas, BLM management actions to authorize or regulate activities, and the resource potential to support development. As previously noted, unencumbered BLM-managed lands throughout the planning area generally make up an extremely small portion of the community subsistence use areas or do not fall within a community subsistence area.

### **B.1 Evaluation and Findings for Alternative A (Current Management)**

Alternative A in the PRMP/FEIS is the Current Management alternative. Selection of this alternative would result in continued management of the lands within the planning area through existing programs, including those guidelines established in the 1980 Southcentral Management Framework Plan, as amended. Under Alternative A, the current levels, methods, and mix of multiple use management of BLM-managed lands in the planning area would continue, and resource values would receive management attention at present levels. No lands would be open to oil and gas leasing, including leasing for coalbed natural gas (CBNG), and large tracts would remain closed to the operation of the mineral laws due to retention of the Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals. No special management areas would be established. No classifications for OHV management would be established. In general under

Alternative A, most activities would be analyzed on a case-by-case basis, and few uses would be limited or excluded as long as they were consistent with State and federal laws.

### **B.1.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs**

Effects from future management under Alternative A are estimated to be limited to a very small portion of the unencumbered BLM-managed lands and to be highly localized in scale. The potential for development of timber resources on BLM-managed lands is extremely limited (see Section 3.3.1), estimated at 20 acres of disturbance per year for the entire planning area (see Section 4.6 Forestry). So adverse impacts to subsistence fish and wildlife resources would be minor and on an extremely local scale. As described in Appendix G, areas with the potential for disturbance from mineral development represent 2,618 acres, of which 2,558 is for oil and gas development throughout the entire planning region and 60 acres is for locatable (or hard rock mining) on the BLM managed lands. Even if all this were to occur on BLM lands, it would represent less than one percent of the BLM-managed lands within the planning area. Unrestricted OHV use on BLM-managed lands has the potential for localized impacts, which may include changes in stream morphology, increased levels of pollution, impacts to wildlife habitat, and disturbance of wildlife, but the scale of these impacts depends upon the proportion of unencumbered BLM-managed land within the subsistence use areas of communities, and the characteristics of these lands, including the value as harvest areas and the proximity to the community (see Section 4.3.4.2.2). Moreover, the greatest potential for impacts from unrestricted OHV use is found in the Knik River area on selected lands beyond the scope of this Section 810 Analysis. While increases in recreation may result in subsistence users avoiding areas of intense recreational use, little such conflict is estimated for unencumbered BLM-managed lands, given the small scale and dispersal of these lands.

### **B.1.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved**

The PRMP/FEIS examined and developed management guidelines for all unencumbered BLM-managed lands located within the Ring of Fire planning area. These are the lands on which the federal rural subsistence priority applies. In terms of BLM land management actions to support the federal rural subsistence priority, selected lands and lands conveyed to other parties cannot be substituted for the lands on which the federal subsistence priority does apply. Other federal lands managed by the National Park Service (NPS), the United States (U.S.) Fish and Wildlife Service (USFWS), and U.S. Department of Agriculture (USDA) Forest Service cannot be included. State and Native corporation lands within the planning area cannot be considered available for BLM-managed activities in a BLM land use plan. Since this land use plan comprehensive addresses all BLM-managed lands within the planning area, by definition, there are no other lands available for the BLM land management purposes sought to be achieved in the PRMP/FEIS.

### **B.1.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes**

The PRMP/FEIS examines all the BLM-managed lands in the planning area. Alternative A, the Current Management alternative, would continue the status quo, and as noted above, will result in minimal, localized impacts on subsistence resources and their habitats, and on federally protected subsistence uses of BLM lands. In relative terms, two other alternatives considered within the Ring of Fire PRMP/FEIS (Alternatives C and D) would further reduce the use,

occupancy, or disposition of public lands needed for subsistence purposes. The specific effects of these two alternatives are analyzed more fully in subsequent sections.

The limit case of eliminating the use, occupancy, or disposition of public lands needed for subsistence would be at odds with the BLM legal mandates under FLPMA, which require that the lands be managed for multiple uses. 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 this purpose. However, this alternative is not viable given BLM's legal mandates. Changing FLPMA, and thus management of public lands, would require an act of Congress.

#### **B.1.4 Findings**

Under Alternative A, management would continue under the existing guidelines, including direction for those areas covered by the Southwest Management Framework Plan of 1980. The effects analysis of the Alternative A on subsistence presented in Chapter 4 considers the potential impacts from management of timber, mineral development, changes in land selections and status, OHVs, and recreation. This analysis concludes that Alternative A would have a negligible effect on abundance and availability of subsistence resource populations and on access to subsistence resources, and that standard stipulations developed by BLM for all activities would serve to minimize, to the extent possible, impacts to subsistence uses of unencumbered BLM-managed lands in the planning area. Alternative A will not significantly restrict subsistence uses.

## **B.2 Evaluation and Findings for Alternative B (Resource Development)**

Alternative B would provide for active management to facilitate resource development. Nearly all unselected lands would be open to oil and gas leasing and development and all ANCSA 17(d)(1) withdrawals would be revoked, allowing increased mineral exploration and development, although actual levels of development would depend upon the occurrence of mineral resources on BLM-managed lands. BLM-managed lands would be designated as "open" to OHV use, so travel and trail restrictions would be minimal. No special management areas for resource conservation or recreation would be established. Resource values, including subsistence, would be protected through stipulations and Required Operating Procedures (ROPs) implemented in specific areas in response to proposed actions as opposed to broad areas in special designations.

### **B.2.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs**

Under Alternative B, the potential for timber development on BLM lands is extremely limited (see Section 3.3.1), resulting in an estimated 20 acres of disturbance per year for the entire planning area (see Section 4.6 Forestry). Lifting the 17(d)(1) withdrawals would open significant areas to mineral leasing, but based on resource potential described in Appendix G, 2,618 acres have the potential for disturbance from mineral development. Of this total, 2,558 acres are for oil and gas development throughout the entire planning area, not just on the BLM lands. 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 the Southcentral region. The potential area of development represents less than one percent of the BLM-managed lands in the planning area. In addition, any such developments would be subject to stipulations and ROPs (Appendix D) that further limit the potential for adverse impacts to fish and wildlife and their habitats. OHV

management and growth in recreation under Alternative B would be similar to the case in Alternative A, and while localized impacts may occur, these are limited to relatively small areas, and most likely in areas removed from unencumbered BLM-managed lands on which the federal subsistence priority applies. In sum, impacts to subsistence resource abundance and availability are minimal and limited to a localized level. Effects on access and competition for subsistence resources are similarly rated minimal.

### **B.2.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved**

The PRMP/FEIS examined and developed management guidelines for all unencumbered BLM-managed lands located within the planning area. These are the lands on which the federal rural subsistence priority applies. In terms of BLM land management actions to support the federal rural subsistence priority, selected lands and lands conveyed to other parties cannot be substituted for the lands on which the federal subsistence priority does apply. Other federal lands managed by NPS, USFWS, and USDA Forest Service cannot be included. State and Native corporation lands within the planning area cannot be considered available for BLM-managed activities in a BLM land use plan. Since this land use plan comprehensively addresses all BLM-managed lands within the planning area, by definition, there are no other lands available for the BLM land management purposes sought to be achieved in the PRMP/FEIS.

### **B.2.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes**

The PRMP/FEIS examines all the BLM-managed lands in the planning area. While Alternative B, the resource development alternative, would facilitate development, given the small scale and dispersal of unencumbered BLM-managed lands and the low level of resource potential and development pressure for timber, oil and gas, and locatable minerals, this alternative will result in minimal, localized impacts on subsistence resources and their habitats, and on federally protected subsistence uses of BLM lands. In relative terms, two other alternatives considered within the Ring of Fire PRMP/FEIS (Alternatives C and D) would further reduce the use, occupancy, or disposition of public lands needed for subsistence purposes. The specific effects of these two alternatives are analyzed more fully in subsequent sections.

The limit case of eliminating the use, occupancy, or disposition of public lands needed for subsistence would be at odds with the BLM legal mandate under FLPMA, which requires that the lands be managed for multiple uses. 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 this purpose. However, this alternative is not viable given BLM's legal mandates. Changing FLPMA, and thus management of public lands, would require an act of Congress.

### **B.2.4 Findings**

This analysis considers the effects of management of timber, lands and realty, mineral development, special management areas, OHVs, recreation, and the effectiveness of the associated stipulations and ROPs (Appendix D) as presented by BLM. The analysis concludes that the effect of Alternative B to subsistence would be greater than that of any of the other alternatives, but would remain localized and would not significantly affect subsistence species or resources on a population scale. In sum, even with the more development oriented provisions of Alternative B, the configuration of unencumbered BLM-managed lands relative to subsistence

use areas and the limited resource potential for development means that impacts to subsistence are minimal and highly local in scale. BLM management activities under Alternative B will not significantly reduce abundance or availability of subsistence resources, nor significantly limit access to these subsistence resources. Alternative B will not significantly restrict subsistence uses.

### **B.3 Evaluation and Findings for Alternative C (Resource Conservation)**

Alternative C emphasizes active measures to protect and enhance resource values, which for the most part enhances subsistence opportunities. Oil and gas leasing and mineral exploration and development would be more constrained than in other alternatives. On a substantial portion of the BLM-managed lands within the planning area, leasing and mineral location would be excluded to protect important resources. Three special management areas, one to protect unique resources in the Neacola Mountains, and two to more closely manage recreational opportunities (one each in the Knik River area and the Haines Block), would be established. All BLM-managed lands would be classified as “limited” in reference to OHV management, under which OHV use would be limited to existing roads and trails. This limitation is the same as the Generally Allowed Uses on State land (Appendix E). This designation generally provides for more focused regulation to protect habitat, soil and vegetation, and recreational experiences, when compared to the undesignated status in Alternative A and the “open” designation in Alternative B. ANCSA 17(d)(1) withdrawals would be maintained as an interim measure while other withdrawal or land management actions are developed to protect important resources. Finally, management actions would include Stipulations and ROPs to further protect specific resources.

#### **B.3.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs**

Under Alternative C, timber development is estimated to result in 20 acres of disturbance per year (see Section 4.6 Forestry), in light of the extremely limited potential for timber development (see Section 3.3.1). With retention of the 17(d)(1) withdrawals, mineral development would be less than the 2,618 acres identified in Alternative B, based upon the assessment of mineral potential in Appendix G. Significant additional protections to resources come with the establishment of specially designated areas. The Neacola Mountains Area of Critical Environmental Concern (ACEC) protects important wildlife habitats in the southernmost block (229,000 acres) of unencumbered BLM-managed land in the Southcentral region. This special management area will be in the vicinity of, but to the west of, the contemporary subsistence use area for the residents of Tyonek. Although outside of unencumbered lands subject to this analysis, special Recreational Management Areas (SRMAs) would be established on selected lands in the Knik River area of the Southcentral region, and the Haines Block of the Southeast region. These designations require that implementation level plans be developed to protect the resources and uses for which the designation was made. Generally, this would result in closer management of OHV and recreation activities. Segments of 14 rivers were determined eligible, but not suitable for WSR designation, which would generally protect subsistence fishery resources and habitat. However, all river segments are on selected lands, not subject to the federal subsistence priority. Identified resource values of these rivers will be taken into consideration when evaluating future proposed actions in those areas. Overall, impacts to subsistence fish and wildlife resources and their habitats and to subsistence uses would be very minimal and highly localized.

### **B.3.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved**

The PRMP/FEIS examined and developed management guidelines for all unencumbered BLM-managed lands located within the Ring of Fire planning area. These are the lands on which the federal rural subsistence priority applies. In terms of BLM land management actions to support the federal rural subsistence priority, selected lands and lands conveyed to other parties cannot be substituted for the lands on which the federal subsistence priority does apply. Other federal lands managed by NPS, USFWS, and USDA Forest Service cannot be included. State and Native corporation lands within the planning area cannot be considered available for BLM-managed activities in a BLM land use plan. Since this land use plan comprehensively addresses all BLM-managed lands within the planning area, by definition, there are no other lands available for BLM land management purposes sought to be achieved in the PRMP/FEIS.

### **B.3.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes**

The PRMP/FEIS examines all the BLM-managed lands in the planning area. Alternative C emphasizes protection of resource values. When compared to the other alternatives, Alternative C would result in the lowest level of use, occupancy, or disposition of public lands needed for subsistence purposes.

The limit case of eliminating the use, occupancy, or disposition of public lands needed for subsistence would be at odds with the BLM legal mandate under FLPMA, which requires that the lands be managed for multiple uses. 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 this purpose. However, this alternative is not viable given BLM's legal mandates. Changing FLPMA, and thus management of public lands, would require an act of Congress.

### **B.3.4 Findings**

This analysis considers the effects of management of timber, lands and realty, mineral development, specially designated areas, OHVs, recreation, and the effectiveness of the associated stipulations and ROPs (Appendix D) as presented by BLM. The analysis concludes that Alternative C would have a negligible effect on subsistence species, access to subsistence resources, or subsistence use, and that the effect would be less than that of any of the other alternatives. Effects would be highly localized and would not significantly affect subsistence fish and wildlife resources on a population scale. Adequate stipulations and ROPs (Appendix D) have been incorporated into Alternative C to ensure that significant reduction to subsistence species and resources is unlikely to occur. Alternative C will not significantly affect the abundance or availability of subsistence resources, nor the access or competition for subsistence resources on unencumbered BLM-managed lands. Alternative C will not significantly restrict subsistence uses.

## **B.4 Evaluation and Findings for Alternative D (Proposed Action)**

Alternative D emphasizes a balance of protection, use, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than those implemented under Alternative C. The majority of unselected lands, and those selected lands whose selection would be relinquished or rejected, would be open to oil and gas leasing and development and mineral locations, though certain unique or sensitive areas would

remain closed, and ROPs and lease stipulations, outlined in Appendix D, would apply. ANCSA 17(d)(1) withdrawals would be revoked. Three special management areas would be established. The Neacola Mountain ACEC would protect unique resources through an implementation-level plan. The Knik River and Haines Block SRMAs would require development of implementation-level plans to more closely manage OHV and recreation activities. All BLM-managed lands would be classified as “limited” in reference to OHV management, which provides for more focused regulation to protect habitat, soil and vegetation, and recreational experience. This alternative represents the mix and variety of actions that, in the judgment of BLM, best resolve the issues and management concerns in consideration of all values and programs. Alternative D is BLM’s proposed action.

#### **B.4.1 Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs**

Effects to subsistence resources and uses from future management under Alternative D are likely to be limited in scale to specific, localized areas. Based on extremely limited development potential (see Section 3.3.1), timber development would be limited to an estimated 20 acres of disturbance per year (see Section 4.6 Forestry). Revocation of ANCSA 17(d)(1) withdrawals would open significant areas to oil and gas leasing as in Alternative B, but given the limited resource potential described in Appendix G, a total of 2,618 acres, or less than one percent of BLM-managed lands, are estimated likely to see disturbance from all forms of mineral development. All permitted activities, including timber and mineral development, would be subject to ROPs and stipulations identified in Appendix D, 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), set-backs from fish-bearing streams and lakes (FWH-6), and buffers from water bodies in timber sales (FWH-10). As in Alternative C, three special management areas (the Neacola ACEC and the Knik River and Haines Block SRMAs) would be established. The ACEC is focused on protecting resources and habitat, while the SRMAs provide for closer management of OHV and recreation activities. All other BLM-managed lands would be designated as “limited” in terms of OHV management, providing for closer regulation and reduced impacts to habitat and resources.

#### **B.4.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved**

The PRMP/FEIS examined and developed management guidelines for all unencumbered BLM-managed lands located within the Ring of Fire planning area. These are the lands on which the federal rural subsistence priority applies. In terms of BLM land management actions to support the federal rural subsistence priority, selected lands and lands conveyed to other parties cannot be substituted for the lands on which the federal subsistence priority does apply. Other federal lands managed by NPS, USFWS, and USDA Forest Service cannot be included. State and Native corporation lands within the planning area cannot be considered available for BLM-managed activities in a BLM land use plan. Since this land use plan comprehensively addresses all BLM-managed lands within the planning area, by definition, there are no other lands available for BLM land management purposes sought to be achieved in the PRMP/FEIS.

### **B.4.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes**

The PRMP/FEIS examines all the BLM-managed lands in the planning area. Alternative D incorporates a balanced mix of the resource development provisions of Alternative B and the resource protection provisions of Alternative C. While Alternative C would result in the lowest level of impacts on unencumbered BLM-managed lands used for subsistence, Alternative D will also result in very low levels of impacts to subsistence resources and their habitats, and to subsistence uses, while better meeting BLM's legal mandate to provide for a range of permitted uses.

The limit case of eliminating the use, occupancy, or disposition of public lands needed for subsistence would be at odds with the BLM legal mandate under FLPMA, which requires that the lands be managed for multiple uses. 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 this purpose. However, this alternative is not viable given BLM's legal mandates. Changing FLPMA, and thus management of public lands, would require an act of Congress.

### **B.4.4 Findings**

This analysis considers the effects of management of timber, lands and realty, mineral development, special management areas, OHVs, recreation, and the effectiveness of the associated stipulations and ROPs (Appendix D) as presented by BLM. The analysis concludes that Alternative D (the proposed action) would have a negligible effect on subsistence species, access to subsistence resources, or subsistence uses. The effects would be localized and would not significantly affect subsistence species or resources on a population scale. Adequate stipulations and ROPs (Appendix D) have been incorporated into Alternative D to further reduce the potential for significant reductions in the abundance and availability of, access to, or competition for subsistence species and resources on the unencumbered BLM-managed lands. Alternative D will not significantly restrict subsistence uses.

## **B.5 Evaluation and Findings for the Cumulative Case**

The goal of the cumulative analysis is to evaluate the additive or synergistic impact of the current action in conjunction with all past, present, and reasonably foreseeable future actions in or near the planning area. The cumulative analysis considers activities, described in Section 4.4.2, that are likely to occur. These activities include ongoing timber sales in the Tongass National Forest (TNF) most of which would be distant from the BLM unencumbered lands in the region, since these latter are concentrated in the Lake Carlanna Municipal Watershed near Ketchikan. Several significant transportation and utility corridors are foreseen for the planning area, notably the Cook Inlet to Bristol Bay corridor which commences at Williamsport on the west side of Cook Inlet within the planning area, and in the vicinity of Native-selected parcels of BLM-managed lands in the Iniskin River and Ursus Cove areas. For the Pebble Mine project, located in the vicinity of Lake Clark outside of this planning area, an industrial road from Iniskin Bay to the mine area is also under review by the Alaska Department of Transportation and Public Facilities. Several significant potential developments for oil and gas and locatable minerals are noted for the planning area, include Alaska Department of Natural Resources tentatively scheduled oil and gas leasing on State lands in the Alaska Peninsula area, additional leasing in Cook Inlet, and the 40 acre Wishbone Hill Coal field near Sutton in the Southcentral region. A private mining firm, Coeur Alaska, is proceeding with plans to renew operations at the



Kensington and Jualin mines in the Southeast region. Continuing growth in heli-skiing operations is forecast for CNF in the Southcentral region and on the State, State-selected and Forest Service (TNF) lands near Haines in the Southeast region.

### **B.5.1 Evaluation of the Effect of Such Use, Occupancy, or Disposition on Subsistence Uses and Needs**

The evaluation of direct and indirect effects of each of the four alternatives in the PRMP/FEIS concluded that impacts to subsistence uses would not rise to the threshold of creating significant restrictions as a result of BLM management activities. The cumulative case adds consideration of past, present, and reasonable foreseeable future actions (RFFAs) initiated by other parties, including several important infrastructure and resource development prospects for the planning area as summarized above in the previous section. RFFAs are described in Section 4.4.2, and include climate change, forestry, transportation infrastructure development, mineral developments, and recreation. The comparatively modest BLM land base and the low development pressure on BLM-managed lands in the planning area were key in the conclusion that overall impacts from BLM-managed activities are small and local in scale. The RFFAs, in contrast, generally operate at a larger geographic scale and over longer time frames. Some of these actions will damage habitat, disturb resources, and displace other uses, though various regimes of environmental review and mitigation would be employed, and the contribution to overall impacts on BLM lands will depend on scale, extent, and location.

The specific question in this component of the Section 810 Analysis is whether or not the BLM-managed actions and the RFFAs, taken together, would result in a significant restriction on subsistence uses of the unencumbered BLM-managed lands on which the federal subsistence priority applies. The proximity of the RFFAs to the unencumbered BLM lands is a key factor in assessing their contributions to impacts and the potential to significantly restrict subsistence uses.

A major potential development is found in the Bristol Bay-Cook Inlet transportation and utility corridor, concluding at tidewater in Iniskin Bay, particularly when combined with the possibility of serving as a primary transportation corridor to the large-scale Pebble Mine prospect in the Lake Clark area beyond the Ring of Fire planning area. Although BLM manages some selected parcels of land nearby in the vicinity of Iniskin River and Ursus Cove, this area is well outside of the community subsistence use areas of Tyonek to the north on the west side of Cook Inlet, and of the Kenai Peninsula communities, for which the subsistence use areas extend to the west side of Cook Inlet, which is considerably to the north of this location (see Figure 3.5-3, Appendix A, Subsistence Use Areas of the Southcentral region).

Also potentially of significant scale over time are the proposed State oil and gas leases on the Alaska Peninsula, additional leases in Cook Inlet, and the coal mine near Sutton. Each of these developments affects lands and waters within the community subsistence use areas in the Alaska Peninsula and Southcentral regions. However, in all three cases, the development initiatives would not occur in proximity to unencumbered BLM-managed lands on which the federal rural subsistence priority applies (see Figure 3.5-2, Appendix A, Subsistence Use Areas of the Alaska Peninsula and Kodiak Island, and Figure 3.5-3, Appendix A, Subsistence Use Areas of the Southcentral Region). The Kensington and Jualin mines in the Southeast region are major industrial projects, closely managed for environmental effects, with the potential to disturb some resources and uses in the vicinity. However, these mines are sited to the north of

Juneau, outside of the mapped community subsistence use areas shown in Figure 3.5-4, Appendix A, Subsistence Use Areas of the Southeast Region.

Heli-skiing operations on the Kenai Peninsula within CNF would occur in part within the mapped community subsistence areas, shown in Figure 3.5-3 (Appendix A), but during limited times of year and not in proximity to unencumbered BLM-managed lands on which the federal subsistence priority is implemented. The heli-skiing operations on State, State-selected (BLM-managed) and USDA Forest Service lands in the vicinity of Haines have met with public controversy, and could potentially affect resources on State-selected BLM-managed lands, which are proposed as an SRMA under Alternatives C and D. These lands are outside of the mapped subsistence use area, as displayed in Figure 3.5-4 (Appendix A), Subsistence Use Areas of the Southeast Region.

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 their habitats. The analysis of impacts on Fisheries and Aquatic Habitat, Section 4.3.3.3, concluded many of the RFFAs have the potential to adversely effect drainage patterns, water quality, fish habitat, and fish, depending on the location of the activity, and the management measures under the various alternatives to the PRMP/FEIS. The analysis of wildlife in Section 4.4.2.4.3 concludes that the RFFAs might contribute to site specific loss or fragmentation of habitat, disturbance of wildlife species, and impediments to migratory patterns, depending on the location of the activity and the management measures adopted under the PRMP/FEIS. Alternatives C and D generally provide greater protection for fish and fish habitat, because they hold to minimums the direct and indirect effects of BLM managed or permitted activities through ROPs and stipulations (Appendix D), limitations on OHV use, and future implementation planning in three special management areas. Alternatives A and B retain existing management or open new opportunities for resource uses, and thus would offer less protection to buffer the additive effect of any RFFAs

However, given the general locations of key RFFAs in relation to the unencumbered BLM-managed lands on which the Federal subsistence priority applies, the widely dispersed character of the BLM lands, and the very low proportion of BLM land within overall community subsistence use areas, it is reasonable to conclude that extremely small additive, and no synergistic impacts are likely to the abundance and availability of resources for subsistence uses on these lands. The locations of these RFFAs and the unencumbered BLM lands also make it unlikely that the cumulative effects will significant diminish the physical or legal access of subsistence users to these lands and resources, or significantly increase competition for use of these lands.

In sum, the activities reviewed in the cumulative case will have no or negligible additive impact on subsistence resources and their habitats, or on subsistence uses of the unencumbered BLM-managed lands on which the Federal subsistence priority applies.

### **B.5.2 Evaluation of the Availability of Other Lands for the Purposes Sought to be Achieved**

The PRMP/FEIS examined and developed management guidelines for all unencumbered BLM-managed lands located within the Ring of Fire planning area. These are the lands on which the federal rural subsistence priority applies. In terms of BLM land management actions to support the federal rural subsistence priority, selected lands and lands conveyed to other parties cannot be substituted for the lands on which the federal subsistence priority does apply. Other federal

lands managed by NPS, USFWS, and USDA Forest Service cannot be included. State and Native corporation lands within the planning area cannot be considered available for BLM-managed activities in a BLM land use plan. Since this land use plan comprehensively addresses all BLM-managed lands within the planning area, by definition, there are no other lands available for BLM land management purposes sought to be achieved in the PRMP/FEIS.

### **B.5.3 Evaluation of Other Alternatives That Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes**

The cumulative case analysis identified a set of reasonably foreseeable future developments in the planning area and evaluated the extent to which these might affect unencumbered BLM-managed land, and the extent to which activities on the BLM managed lands would contribute to the cumulative impacts. In Alternatives C and D, BLM examined two approaches that would minimize the use, occupancy or disposition of public lands needed for subsistence. However, the development project identified in the cumulative place occur outside of BLM-managed lands, in locations driven by resource occurrence and abundance. Given the site-specific requirements of the infrastructure and resource development projects identified as RFFAs, it is not feasible to substitute other lands for these projects.

The limit case of eliminating the use, occupancy, or disposition of public lands needed for subsistence would be at odds with the BLM legal mandate under FLPMA, which requires that lands be managed for multiple uses. The only alternative that would eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes would be an alternative that prohibited any activity that conflicted with subsistence use or subsistence users. However, this alternative is not viable given the BLM's legal mandates. Changing FLPMA, and thus management of public lands, would require an act of Congress.

### **B.5.4 Findings**

The cumulative case, as presented in this analysis, results in no or negligible additional impacts on subsistence resources and their habitats on and near the unencumbered BLM-managed lands on which the federal subsistence priority applies. As a result, the cumulative case will not significantly restrict subsistence uses.

## **C. Notice and Hearings**

ANILCA Section 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy, or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Section 810(a)(1) and (2). The evaluation of potential impacts to subsistence uses concluded that for all four alternatives and the cumulative case the plan will not significantly restrict subsistence uses of the unencumbered BLM-managed lands on which the federal subsistence priority applies. This concludes the requirements for compliance with Section 810. No notice or hearings are required in light of this finding.

## **D. Subsistence Determinations Under ANILCA Section 810(a)(3)(A), (B), and (C)**

ANILCA Section 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy, or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the federal agency gives the required notice and holds a hearing in

accordance with ANILCA Section 810(a)(1) and (2), and makes the three determinations required by ANILCA Section 810(a)(3)(A), (B), and (C). The three determinations that must be made are:

- 1) that such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands;
- 2) that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition; and
- 3) that reasonable steps will be taken to minimize adverse impacts to subsistence uses and resources resulting from such actions (16 USC 3120(a)(3)(A), (B), and (C)).

The evaluation of potential impacts to subsistence uses concluded that for all four alternatives and the cumulative case, the Ring of Fire PRMP/FEIS will not significantly restrict subsistence uses of the unencumbered BLM-managed lands on which the federal subsistence priority applies. This concludes the requirements for compliance with Section 810. No further determinations are required in light of this finding.