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TATITLEK VILLAGE IRA COUNCIL

P.O. Box 171
Tatitlek, AK 99677

Ph. (907) 325-2311
FAX (907) 325-2298

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RECEIVED
MAY 14 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

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OCT 02 1995
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

May 4, 1993

Exxon Valdez Oil Spill Trustee Council
645 G Street
Anchorage, AK. 99501

Dear Sirs:

The residents of the Native Village of Tatitlek, most of whom are very dependent on subsistence resources for their lifestyles, have become extremely concerned (probably more concerned than we have been since the first days of the Exxon Valdez Oil Spill) with the safety of consuming any of the marine subsistence resources. Our concerns relate primarily to the condition of the herring, which is not only a staple subsistence resource in our village, but, also a main food source of many of the other resources that we enjoy. The effect that the herring may have on the safety of consuming any of the resources has necessitated the discontinuance of harvests of any of the subsistence resources until we are certain that they are safe for human consumption.

Since the oil spill, the Village of Tatitlek has asserted their belief that the resources and environment were much more affected and for a much longer term than we were being led to believe; we continue to strongly assert this. The resources that our people have subsisted on for generations are no longer available to us, the numbers of these resources have been declining since March 24, 1989. We do not need scientists and researchers to tell us this, generations of knowledge and coexistence with these resources tell us this. We do, however, need the scientists and researchers to explain to us how the resources have been affected, how long we can expect these resources to remain affected, and the safety of consuming any of the resources.

While the Tatitlek Village IRA Council has not had a great degree of involvement in the restoration process, we have followed the progress of the process very closely and are very appreciative of the efforts of the Trustee Council. At this time, the Village of Tatitlek strongly urges the Trustee Council to give the Subsistence issues a higher priority than they have been given, and provide more funding for researching the affects that the oil spill has had on the resources that the residents of the spill affected areas subsist on. The importance of this research has been magnified greatly by the problems that are surfacing with the health of the Pacific Herring, which can adversely affect the health of the many resources that prey on the herring for their survival. More specific studies of most of the subsistence resources, including seals, seaslion, ducks, salmon, shellfish, and bottom fish, is required to determine the affects that the herring may have had on their health.

As mentioned above, the residents of this village are very worried about the condition of the resources in our area. The herring are sick, the ducks, to some degree are sick, the seal and sea lion populations are declining and we are very concerned about our future lifestyles. All indications are that the resources have been very adversely affected by the oil spill to some degree and we are being told not to worry.

In closing, we would like to express our sincere gratitude and appreciation for the incredible work that you all have done in addressing the restoration of the resources and environment impacted by the oil spill. We also hope that attention will be given to those organizations and communities who do not have the capability to attend the public meetings of the Trustee Council that other organizations do. It is very important that the issues that face the residents of the spill zone are recognized and addressed.

Thank you very much, take care.

Sincerely,

Gary P. Kompkoff,
President, Tatitlek Village IRA Council
Vice-Chairman, Chugach Regional Resources Commission
Chairman, Chugach Environmental Protection Consortium

gpk
cc: Mr. Jim Fall, Subsistence Div, ADFG
Chugachmiut
The Tatitlek Corporation

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TEXAS A & M University AT GALVESTON
Dept of Marine Biology
POB 1675
GALVESTON TX 77553-1675

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EXXON VALDEZ TRUSTEE COUNCIL
1994 Work Plan Work Group
645 "G" Street
Anchorage, Alaska 99501

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TEXAS A&M UNIVERSITY AT GALVESTON

RANDALL W. DAVIS
CHAIRMAN
DEPARTMENT OF MARINE BIOLOGY

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Name: RANDALL DAVIS
Phone: 409 740 4528

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	**Archaeology**	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M								X	
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									X
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M								X	
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									X
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M									X
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									X
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									X
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									X
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									X
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M								X	
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									X
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									X
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M								X	
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									X
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									X
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									X
17	**Bald Eagle**	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M	X								
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M	X								
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M	X								
20	**Black Oystercatcher**	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M		X							
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M		X							

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
22	**Black Oystercatcher**	Restoration Monitoring															
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M									X
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									X
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									X
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									X
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									X
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M									X
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									X
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M									X
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M		X							
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									X
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									X
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									X
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									X
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M									X
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M									X
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M									X
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M	X								
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M									X
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M									X

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Phone: 409 740 4528

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42	Common Murre	Restoration Monitoring						M									
43	Cutthroat/Dolly	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M									X
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M									X
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M									X
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									X
47		Restoration Monitoring						M									X
48	General	Administration	Oil Spill Restoration Support Service and Facilities	X	X	X	$600	1									X
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M		X							
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1									X
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									X
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M									X
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M									X
54		Public Information	PWS Brochures	X			$65	M									X
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									X
56		Public Information	PWS Large Format Photographic Book	X			$100	M									X
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									X
58		Public Information	PWS Video Programs	X			$100	M									X
59		Public Information	Science of the Sound- Education Program	X			$53	M		X							

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60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M	X								
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M									X
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M	X								
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M	X								
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds															X
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M		X							
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M		X							
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M									/
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M									/
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									/
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M									/
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									/
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									/
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M									/
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M									/
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M									/
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M									/
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M									/
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M									/
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M									/
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M									/

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82	**Intertidal**	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M									/
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M									/
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M									/
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M									/
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M									/
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									/
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M									/
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									/
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M									/
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									/
92	**Killer Whale**	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M	/								
93		Monitoring	Recovery Monitoring	X			$125	M	/								
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M	/								
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M									/
96	**Marbled Murrelet**	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M		/							
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M		/							
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M		/							
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M		/							
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M		/							

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102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M			✓						
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M			✓						
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M			✓						
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									✓
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M									✓
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1									✓
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M		✓							
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M		✓							
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M		✓							
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1		✓							
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1		✓							
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1		✓							
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									✓
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1		✓							
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1		✓							
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1		✓							
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1	✓								
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1		✓							
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1		✓							
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1		✓							
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1		✓							
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1		✓							
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1		✓							
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1		✓							
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1		✓							
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1		✓							

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128	**Multiple Resources**	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1			/						
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1			/						
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1			/						
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									/
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M									/
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M									/
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M									/
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									/
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									/
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									/
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									/
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M			/						
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M									/
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M									/
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									/
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M			/						
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									/
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									/
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M									/
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M									/
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									/
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									/
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M									/
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									/
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M									/
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M									/
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M		/							
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M			/						/
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M		/							

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158	Multiple Resources	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M			✓						
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M	✓								
160		Reduce Disturbance by Field Presence															
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M									✓
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M									✓
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M									✓
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M									✓
165	Pacific Herring	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M									✓
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M									✓
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M									✓
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M									✓
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M									✓
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M									✓
171		Restoration Monitoring															✓
172	Pigeon Guillemot	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M		✓							
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M		✓							
174		Restoration Monitoring															
175		Temporary Predator Control															

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93=Funded in 1993 M=Multi-year Project

Name: Randall W. Davis
Phone: 409 740 4528

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
176	**Pink Salmon**	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M									✓
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									✓
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									✓
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									✓
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									✓
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									✓
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									✓
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M									✓
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M									✓
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M									✓
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M									✓
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M									✓
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M									✓
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M									✓
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M									✓
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M									✓
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M									✓
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M									✓
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M									✓
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M									✓
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M									✓
197	**Recreation**	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M		✓							✓
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1	✓								
199		Establish Marine Environmental Institute	Seward Sea Life Center	X	X	X	$40,000	1			✓						
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M			✓						
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M			✓						

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1				✓					
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1				✓					
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M				✓					
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									✓
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									✓
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									✓
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									✓
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									✓
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									✓
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									✓
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									✓
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									✓
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									✓
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									✓
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									✓
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									✓
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									✓
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									✓
220		Option Not Identified	Increased Access PWS	X			$100	M									✓
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									✓
222		Restoration Monitoring									✓						
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M				✓					
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1					✓				
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M				✓					
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									✓
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									✓
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									✓
229		Visitor Center	Environmental Education Center in PWS	X			$90	1				✓					
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1				✓					
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									✓

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Phone: 409 740 4528

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
232	**Recreation**	Visitor Center	Information Center	X	X	X	$600	1									✓
233		Visitor Center	Interpretation of PWS	X			$10	M			✓						
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									✓
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									✓
236		Visitor Center	Valdez Visitor Center	X			$850	1									✓
237	**River Otter**	Monitoring	River Otter Recovery Monitoring	X			$180	M			✓						
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M			✓						
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1			✓						
241	**Rockfish**	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M									✓
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M									✓
243		Monitoring															
244	**Sea Otter**	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M	✓								
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M	✓								
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M	✓								
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M	✓								
249		Restoration Monitoring															

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															✓
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									✓
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M									✓
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M									✓
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M									✓
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M									✓
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M									✓
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									✓
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M									✓
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M									✓
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									✓
261	**Sport Fishing**	Recovery Monitoring															
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									✓
263		Restoration Monitoring															
264	**Subsistence**	Access to Traditional Foods															✓
265		Bivalve Shellfish Hatchery															✓
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M									✓
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1									✓

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
268	Subsistence	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									
269		Option Not Identified	Seward Shellfish Hatchery	X	X	X	$1,300	1									
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M									
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M									
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1									
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M									
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M									
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M									
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M									
280	Subtidal	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M									
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M									
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M									
286		Monitoring	Subtidal Recovery Monitoring	X	X	X	$400	M									
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M									
288	Technical Services	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M									
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M									

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290	**Technical Services**	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M			/						
291		Administration	Toxicological Profile of PWS	X			$150	M			/						
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M			/						
293		Public Information	Database Integration	X	X	X	$148	M			/						
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M			/						
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M			/						
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M			/						
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M			/						

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UNIVERSITY OF ALASKA FAIRBANKS

Department of Forest Sciences
School of Agriculture and Land Resources Management

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0137940521
RECEIVED
MAY 21 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

May 20, 1993

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street
Anchorage, Alaska 99501

Members of the Trustee Council,

I would like to submit for your consideration the enclosed University of Alaska Fairbanks research proposal "Monitoring Natural Restoration Processes of Shoreline and Intertidal Resources at Green Island and Outer Prince William Sound" (AFES 93-23). I am offering this proposal to be included as a part of my comments in response to your notice of April 19, 1993 calling for comments on the 1994 Work Plan. This proposal represents a continuation and extension of a project that I have conducted. To the extent that I have been able to determine it appears to be high priority work that has not yet been addressed in the damage assessment and restoration work program. This project also meets the need identified in the February spill science meeting in Anchorage for long-term, background monitoring work.

I am prepared to begin work on the project according to the needs of your decision schedule.

Sincerely,

Glenn Patrick Juday

Glenn Patrick Juday,
Associate Professor of Forest Ecology
Forest Sciences Department
University of Alaska Fairbanks 99775-0080

RECEIVED
OCT 02 1995
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

AFES 93-23

PROPOSAL TO

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**

FROM

UNIVERSITY OF ALASKA FAIRBANKS
AGRICULTURAL AND FORESTRY EXPERIMENT STATION

TITLE

MONITORING NATURAL RESTORATION PROCESSES OF SHORELINE AND INTERTIDAL RESOURCES AT GREEN ISLAND AND OUTER PRINCE WILLIAM SOUND

FEBRUARY 1993

Glenn Patrick Juday

Glenn Patrick Juday, Principal Investigator
Associate Professor of Forest Ecology
Phone: (907) 474-6717

Nora R Foster

Nora R. Foster
Co-Principal Investigator
Coordinator of Aquatic Collections
University of Alaska Museum

for James V. Drew, Dean, School of
Agriculture and Land Resources Management
Phone: (907) 474-7083

C. E. Graham 5/20/93

Charles E. Graham, Director
Office of Sponsored Programs

AFES 93-23

PROPOSAL SUBMITTED TO THE *EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL

Amount Requested: $ 443,253 total

Start Date: July 1993

Title: Monitoring Natural Restoration Processes of Shoreline and Intertidal Resources at Green Island and Outer Prince William Sound

Principal Investigator: Glenn Patrick Juday
SSN 305-54-9688

Co-Principal Investigator: Nora R. Foster

Monitoring Natural Restoration Processes of Shoreline and Intertidal Resources at Green Island and Outer Prince William Sound

Background and Rationale

Definition and Utility of Ecological Monitoring

Ecological monitoring can be thought of as the set of activities required to obtain disciplined observations of the status of either living or non-living components of an ecosystem to a specified level of precision and the archiving, reporting, and interpretation of the data. Monitoring has an intimate relationship with scientific research, although the two activities are not necessarily the same. Monitoring is a source of historical insight because it continues through time. Monitoring is especially flexible and often develops unexpected insights. Sometimes monitoring generates a data base that is sufficient to critically test a potential explanation (hypothesis) for an unusual set of observations, and at that point monitoring and research become one and the same activity.

Proposal

We propose to continue and expand a project to monitor, interpret, and report on the biological diversity and ecological relationships of recovering intertidal and shoreline ecosystems of outer Prince William Sound affected by the Exxon Valdez oil spill, concentrating on Green Island (figure 1) and selected complementary sites.

General Approaches to Ecological Monitoring

Several successful approaches can be taken to ecological monitoring, and many different plants, animals, or characteristics of the environment may be monitored for valid reasons (Orians 1986, Davis 1989). For example harvested species such as salmon which congregate in relatively easily observed groups, can be and usually are monitored. Species of high public interest, such as whales, are monitored out of concern for their own intrinsic value. The U.S. National Science Foundation supports a network of 17 Long Term Ecological Research sites across the U.S. (including 2 in Alaska) where complex basic ecological processes such as primary production and nutrient cycling are monitored (Callahan 1984).

In addition to monitoring in depth the status of a selected set of species, it is often desirable to monitor the total number of species present, or total biological diversity, as a measure of the health of the environment. This type of monitoring is relatively underdeveloped, and certainly underfunded when compared with the large budgets devoted to monitoring harvested species. When a complete picture of the total biological diversity is clear, it is often possible to interpret and understand how species interact and respond both with other species and with overall patterns in the physical environment. This knowledge provides an interpretive key for reporting the status or "health" of a system and a tool for identifying why there are different responses in different places to major events

such as the *Exxon Valdez* oil spill (Price et al. 1980).

This Proposal's Approaches to Monitoring

Our approach has a unique focus on biological diversity, and will provide some level of information on poorly known plants and animals that may actually play important roles in the ecosystem of south coastal Alaska. Although the importance of this approach is recognized, the capability of the U.S. scientific work force to perform species identification and classification work has declined steadily (Juday 1990). This project will help improve this situation by supporting a graduate student training project. We will note basic ecological interactions (competition, predator-prey,etc.) that either are established in previous research elsewhere or that will provide a basis for further investigations. We intend to take a long term view and build up a base of information about changes in diversity and interactions at our site with time.

Unlike terrestrial systems which show a pronounced decline in the average number of species in a gradient from the equator to the poles, the nearshore realm of the Pacific is still rich in species in southcentral Alaska compared, for example, to southern California (Ricketts et al. 1985). However, because additional taxonomic surveys need to be done in southcentral Alaska, the actual magnitude of the decline in species numbers is not clear. Documenting this phenomenon will be a potential contribution of this study.

We propose to look in depth at a representative region of the Sound rather than try to cover the entire area affected by the *Exxon Valdez* oil spill. Our study area can be comprehensively monitored, and is at risk from potential future oil spills. We feel that the area and topic we propose to work on are appropriately scaled and practical, but of broad applicability.

Our proposal is based upon a study that was initiated previously, although it is currently halted for lack of funding. We intend our project to complement others that *Exxon Valdez* Trustee Council has funded or may fund in response to its damage assessmeny and restoration mandate (Trustee Council 1991). Both state and federal wildlife and resource management agencies, have the mandate to monitor harvested species and high public interest species (marine mammals etc.). Through this proposal we recommend that *Exxon Valdez* Trustee Council recognize and support unmet needs for recovery and restoration studies in the fields such as biological diversity.

Responsiveness to Identified Research and Monitoring Needs

Our proposal fulfills several recommendations on research needs from a 1990 conference sponsored by the Prince William Sound Science Center (1991), especially the following.

> Basic inventories of organisms and environmental factors affecting them are needed for ocean and terrestrial systems.

Studies are needed of major special events and changes in Prince William Sound, specifically the 1964 earthquake uplift and 1989 *Exxon Valdez* oil spill.

Long-term ecosystem studies are needed including those with an interactive approach.

Long-term oil spill studies are needed focusing on near-shore and beach ecosystems.

The Study Area

We propose to conduct our monitoring at Green Island and Little Green Island, with a control (unoiled) site on Hinchinbrook Island. We will examine the potential for limited comparative work at other sites. Green Island is located in outer Prince William Sound (figure 1). A portion of Green Island and Little Green Island (see figure 2) are a proposed Research Natural Area (RNA), a permanent land use designation that would dedicate the area to long-term scientific and educational use (USDA Forest Service 1984). The RNA will be established upon approval of an Establishment Record by the Chief of the Forest Service which has been prepared and is under review. In 1986 we began a project to document the biological diversity features of Green Island RNA. In late March 1989 oil from the *Exxon Valdez* arrived at Green Island (Photo 1).

Oil at Green Island produced a variety of short-term effects typical of many areas of the spill (for example Photo 2). Although obvious signs of oil declined dramatically by the summer of 1990, oil and tar remained trapped in many localities at Green Island (Photo 3), and longer-term effects began to appear (Photo 4).

Suitability of Green Island

Green Island is an ideal location to monitor resources at risk from oil transportation systems for the following reasons.

Green Island experienced a diversity of oiling conditions (light sheen to very heavy oil cover; beach clean-up operations and untreated shoreline) in a compact area.

Because of predominant current patterns (Galt and Payton 1990) Green Island is likely to be affected by any future hazardous material released into Prince William Sound shipping lanes (figure 3).

A diversity of habitats - terrestrial, shoreline, and intertidal - and many organisms (at least 63 birds [author's count, see also Isleib and Kessel 1973]) are present on Green Island. Foster (1987 and unpublished) discovered three marine invertebrate species at Green Island beyond their previously known distribution limits.

Figure 1 PRINCE WILLIAM SOUND AND SOUTH CENTRAL ALASKA

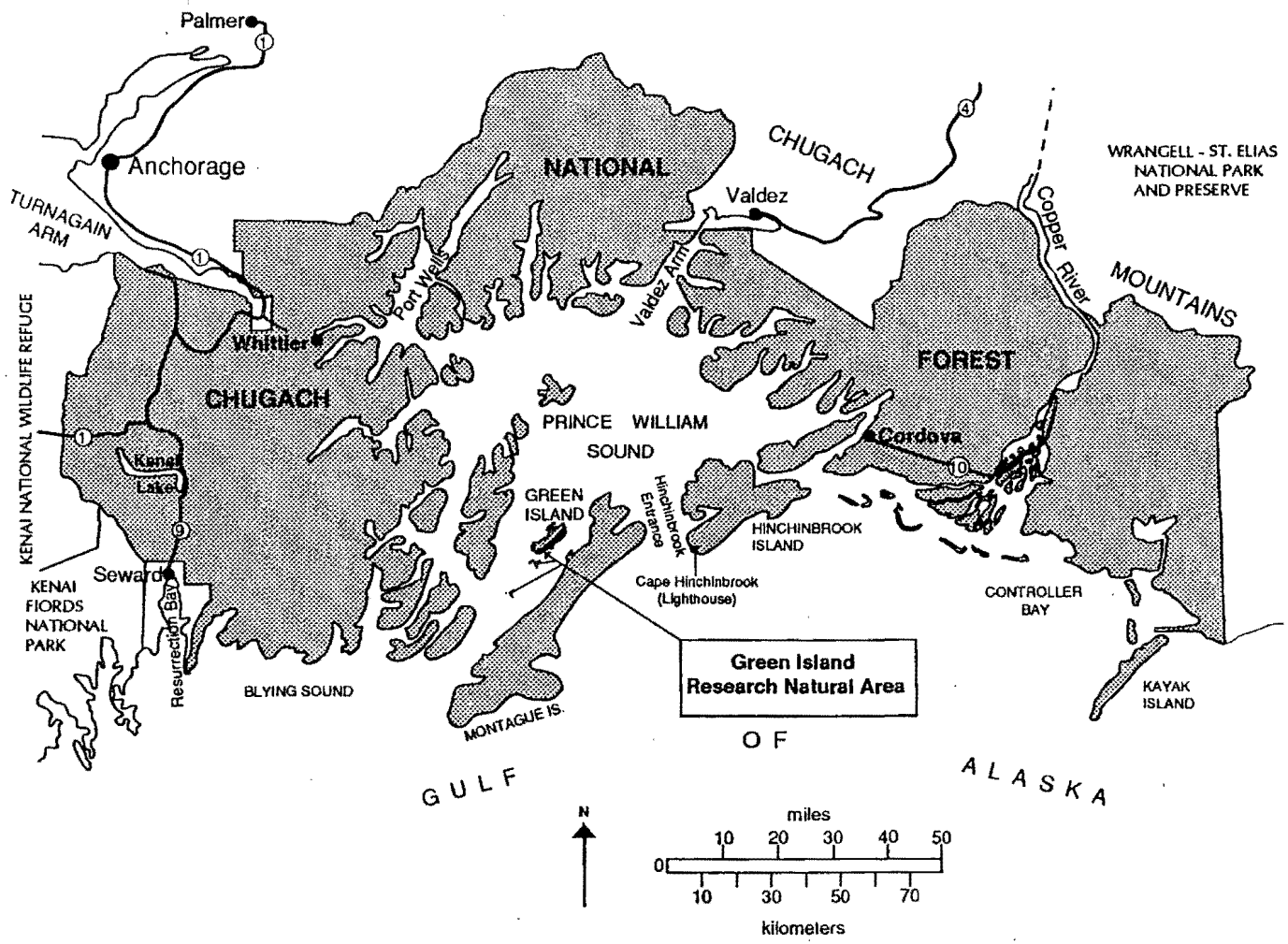


Figure 2 GREEN ISLAND RESEARCH NATURAL AREA

Boundary and Elevation (excluding The Needle)

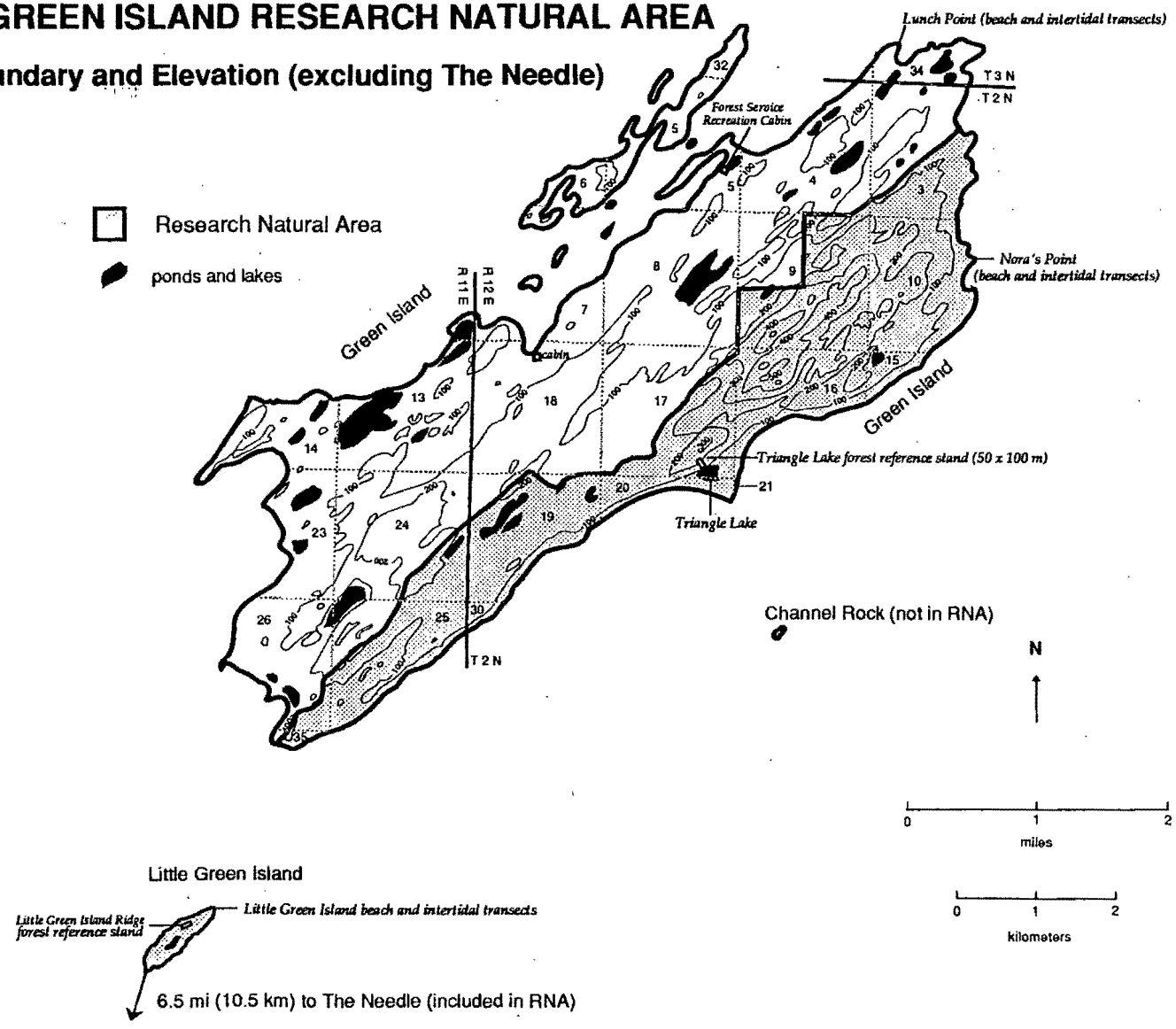
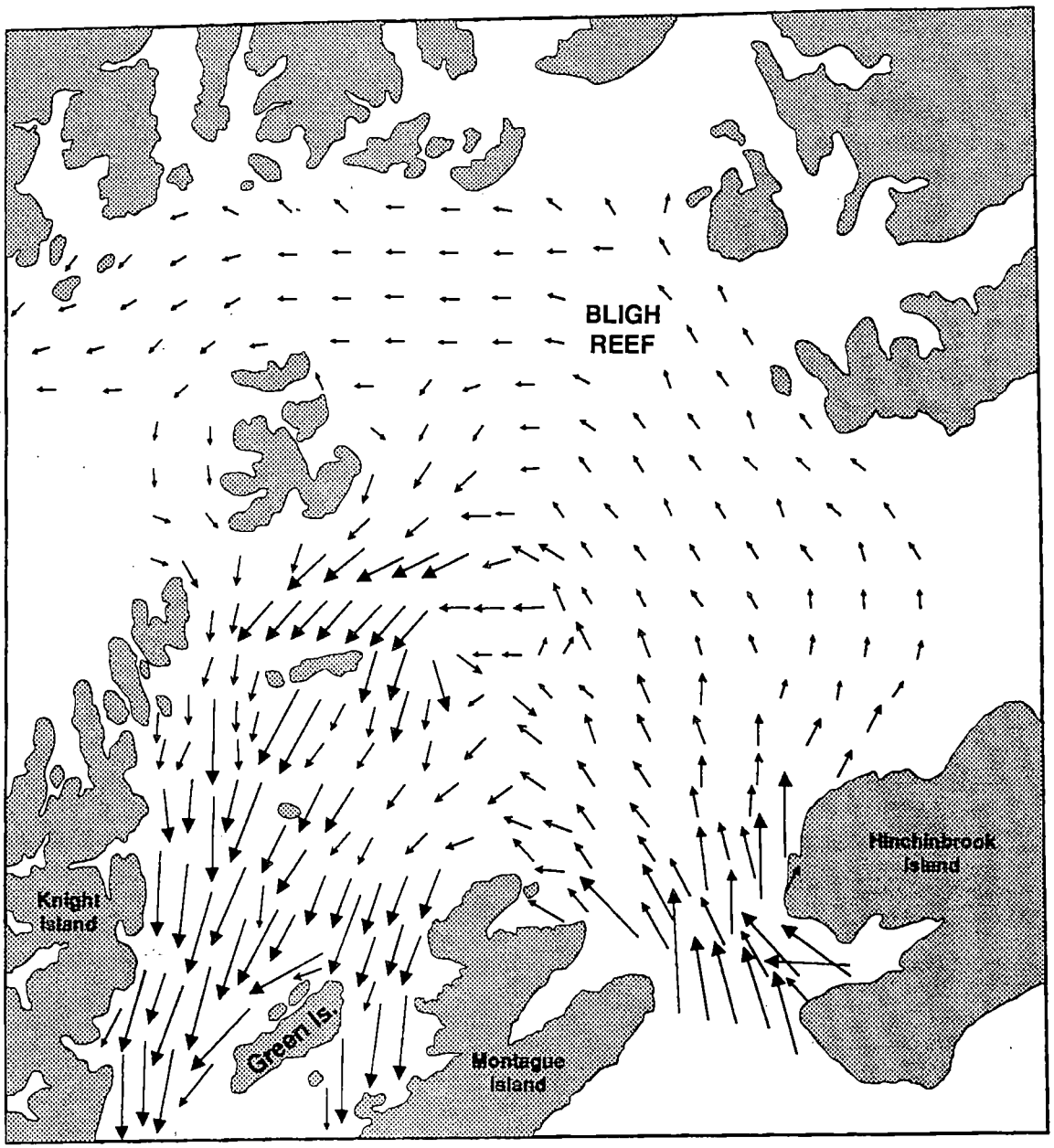


Figure 3 MEAN CURRENT PATTERN IMMEDIATELY FOLLOWING EXXON VALDEZ OIL SPILL, MARCH 1989



Source: Galt and Payton (1990)

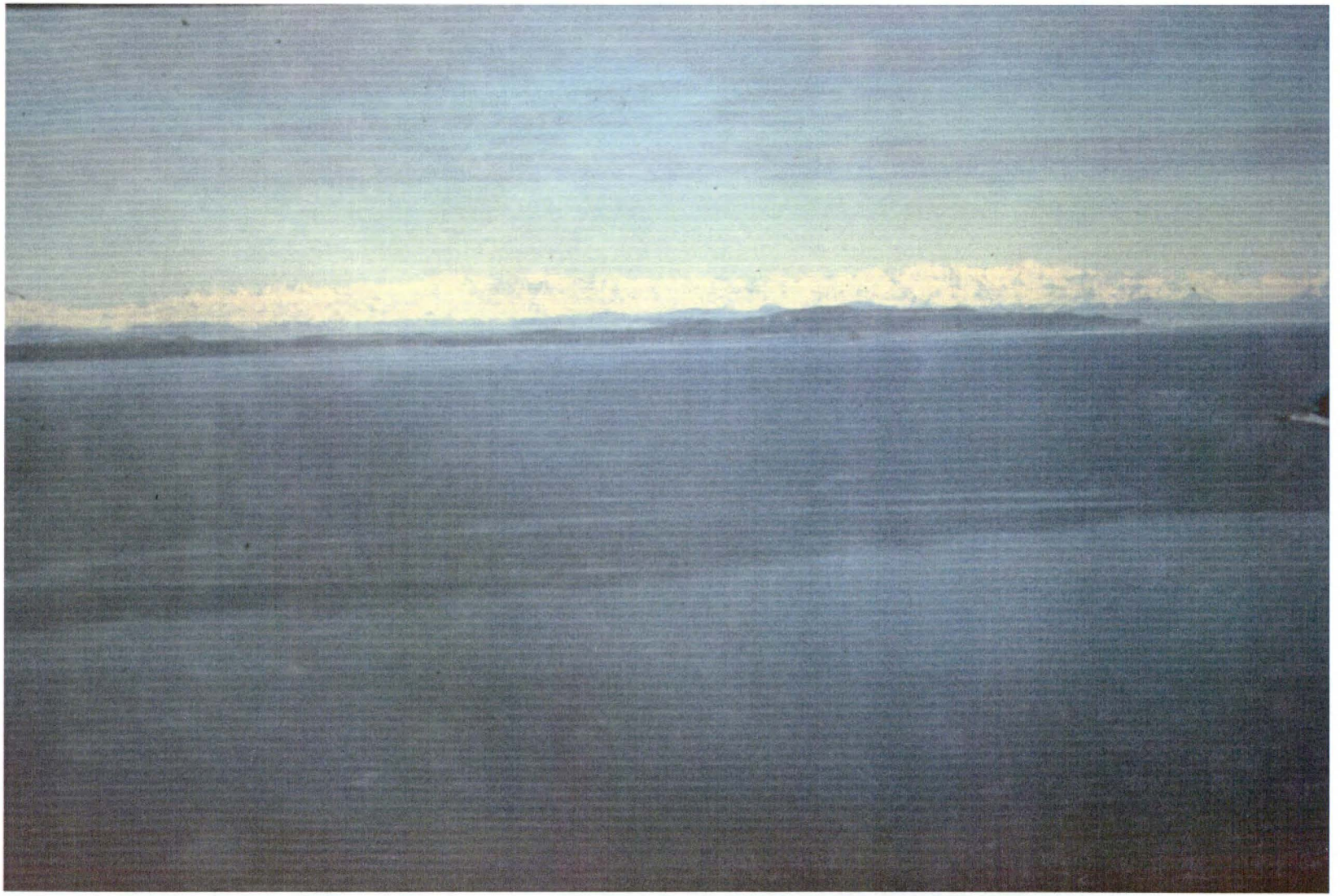


Photo 1. Oil from Exxon Valdez moving through Montague Strait, March 29, 1989. View is looking northwest between Little Green Island (left middleground) and the southern tip of Green Island (right). Snow-capped peaks in background are higher elevations on Knight Island.

Photo 2. Extensive necrosis (death) of surfgrass (Phyllospadix serrulatus) in intertidal zone on Little Green Island, June 1990. Mortality of surfgrass is greatest on top of the patch where the oily tide coated it, but substantial portions at the bottom of the patch that were sheltered by the upper mat remain alive.

Photo 3. A buried oil or tar patch at Lunch Point on Green Island exposed for this picture by turning over a medium-sized rock (note the boot to the left for scale). The oil in this patch settled into a depositional microenvironment in the days immediately after the spill. Winter storms in 1989-90 then deposited boulders and gravel over the top, sequestering the oil. High-precision mapping of August 1989 allowed this patch to be immediately relocated in 1990 even though no trace of oil was visible at the surface then.

Photo 4. A varnish-like coating of black on blue mussel (Mytilus edulis), Nora's Point on Green Island, June 1990. White pen points to the byssus (fibrous threads) that normally reinforce a natural cement holding the mussel shell tight against rock. At this date nearly all tar-stained blue mussels are only loosely attached with byssus completely exposed.

Historically Green Island has been an important research area; additional studies can build on previous work. Detailed inventories of sea otters, harbor seals, sea lions, and colonial-nesting sea birds are available for several years before the spill (Calkins et al. 1975). Sea otters were intensively studied as the oil arrived at Green Island and in the years since, as have most large vertebrates, but those studies are classified as litigation-sensitive at this time.

We have already begun a monitoring project on Green Island that can serve as a foundation for expanded and continuing studies.

Land use on Green Island is already committed to long-term scientific research and education, including monitoring.

Significant Features of Green Island and Outer Prince William Sound

Green Island contains a great diversity of significant, and sensitive resources. The southwest Prince William Sound region was one of nine areas in the world where sea otters survived near-extinction in the early 20th century (Chanin 1985). Green Island and Little Green Island have provided important habitat for sea otters for many years, and more studies of sea otters were conducted at Green Island than any other location in south coastal Alaska (Kenyon 1969, Pitcher and Vania 1973, Garshelis 1983, Garshelis and Siniff 1983, Garshelis 1984, Garshelis and Garshelis 1984, Garshelis et al. 1984, Garshelis et al. 1986, Johnson 1987, VanBlaricom 1987, Irons et al. 1988). The islands are surrounded by shallow bedrock shelves that support highly productive and species-rich intertidal and subtidal kelp forest ecosystems. Kelp forest production is the basis for the food web that supports sea otter (Duggins et al. 1989). Isolated islands within the RNA are used as haul-out sites for the Steller sea lion, a Threatened species, and pupping and resting sites the harbor seal, a declining species (Pitcher 1989) of management concern. The islands are particularly attractive to marine mammals because they are exposed to few or no land predators yet have easy access to productive marine foraging habitat.

Green Island is a major Pacific herring spawning area (ADF&G), has several colonies of marine birds (Sowls et al. 1978), and is part of the most northerly migratory bird overwintering area (Prince William Sound) in North America (Kessel and Gibson 1978).

Green and Little Green Islands are vertically tilted sandstones and shales of the Orca Formation (Dumoulin 1987) and exhibit several features of turbidite rocks including sole markings, rip-up, load casts, and conglomerates (Lethcoe 1990). Wave erosion of coastal bluffs on Green Island maintains bedrock exposures and illustrates particularly well the differential erosion resistance of the turbidite units, which strongly affects the shoreline and intertidal habitat conditions of the area. The islands were uplifted over 2 m by the 1964 Great Alaska earthquake (Plafker 1969, 1990). A zone of forest

and beach succession on the uplifted terrace parallels the shoreline (Eyerdam 1971, Juday 1987).

Our Previous Green Island Study

In August 1989 we began a monitoring project at Green and Little Green Islands funded by university time we donated to the project, re-programmed Forest Service funds for the documentation of natural diversity features of Green Island RNA, and a small University of Alaska Sea Grant travel grant. selected three study locations, Lunch Point, Nora's Point, and Little Green Island (fig. 2). The last two were localities where we had done taxonomic surveys in 1986.

At each site we established horizontal beach transects to map the extent and distribution of oil (Photo 5). Mapping extended from about MHHW (or 3 m above tidal datum) inland to the line of alder shrubs. Patches of oil along the beach larger than 30 cm along either axis were mapped in their entirety. The extent of oil coverage along the beach was mapped in percent cover classes. In the intertidal zone, we established 3 parallel transects oriented perpendicular to the shoreline. Along each transect line we established plots of 0.5 m x 0.5 m at vertical intervals of 1.0 m to determine the condition of marine organisms and communities (figure 4A, 4B, 4C). We photographed the intertidal plots and took notes and made collections of the plants and animals present, and noted the oiling condition. We made cover and abundance measurements from 8" x 10" black and white prints of the photos. Both the horizontal and vertical transects were permanently marked. During an extreme high tide stage we observed patches of oil or tar that were stranded on the lower beach to determine the potential for oil remobilization.

Our 1989 first-year results at Green Island (Juday and Foster 1990) revealed that:

1) the natural background condition of shoreline and intertidal ecosystems is exceptionally dynamic; there is no stable background condition (Photo 6);

2) oil spill effects were concentrated in predictable portions of the intertidal and lower beach zone that relate to tidal heights on the day the oil arrived and shortly after;

3) the oil spill reduced the abundance (measured as cover) of live plants and animals in proportion to the amount of oil that coated the beaches; and

4) not all organisms have been affected equally by the spill.

In June 1991 we returned to Green Island and re-monitored our plots (Juday and Foster 1991). Our 1990-season remonitoring work revealed that:

1) Nearly all the beach oil and tar of 1989 was naturally removed or buried in accreting gravel zones (Photo 3);

Photo 5. Re-monitoring the permanent shoreline transect at Lunch Point on the northern tip of Green Island. Precise relocation of features along the shoreline is obtained from measurements taken perpendicular to a white tapeline. Tapeline is strung between permanently marked locations 25 meters apart, parallel to the shore.

Photo 6. Dense concentration of Pisaster ocracea (Sea stars) at Green Island, August 1989. Intertidal systems at Green Island do not exhibit a stable base line condition. In July 1986, there were no sea stars visible in this portion of Green Island.

Figure 4A. GREEN ISLAND INTERTIDAL TRANSECTS AT LUNCH POINT

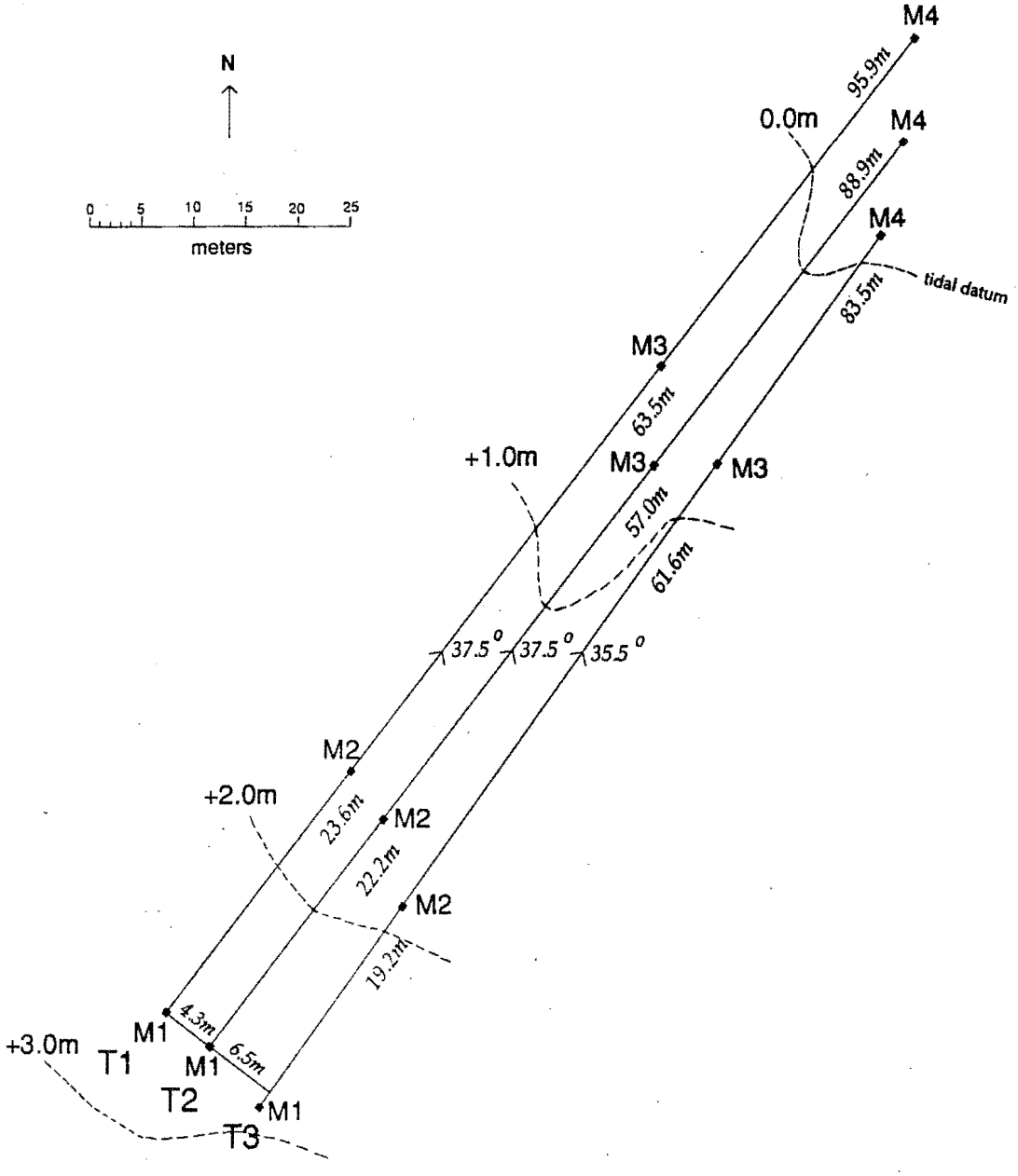


Figure 4B. GREEN ISLAND INTERTIDAL TRANSECT AT NORA'S POINT

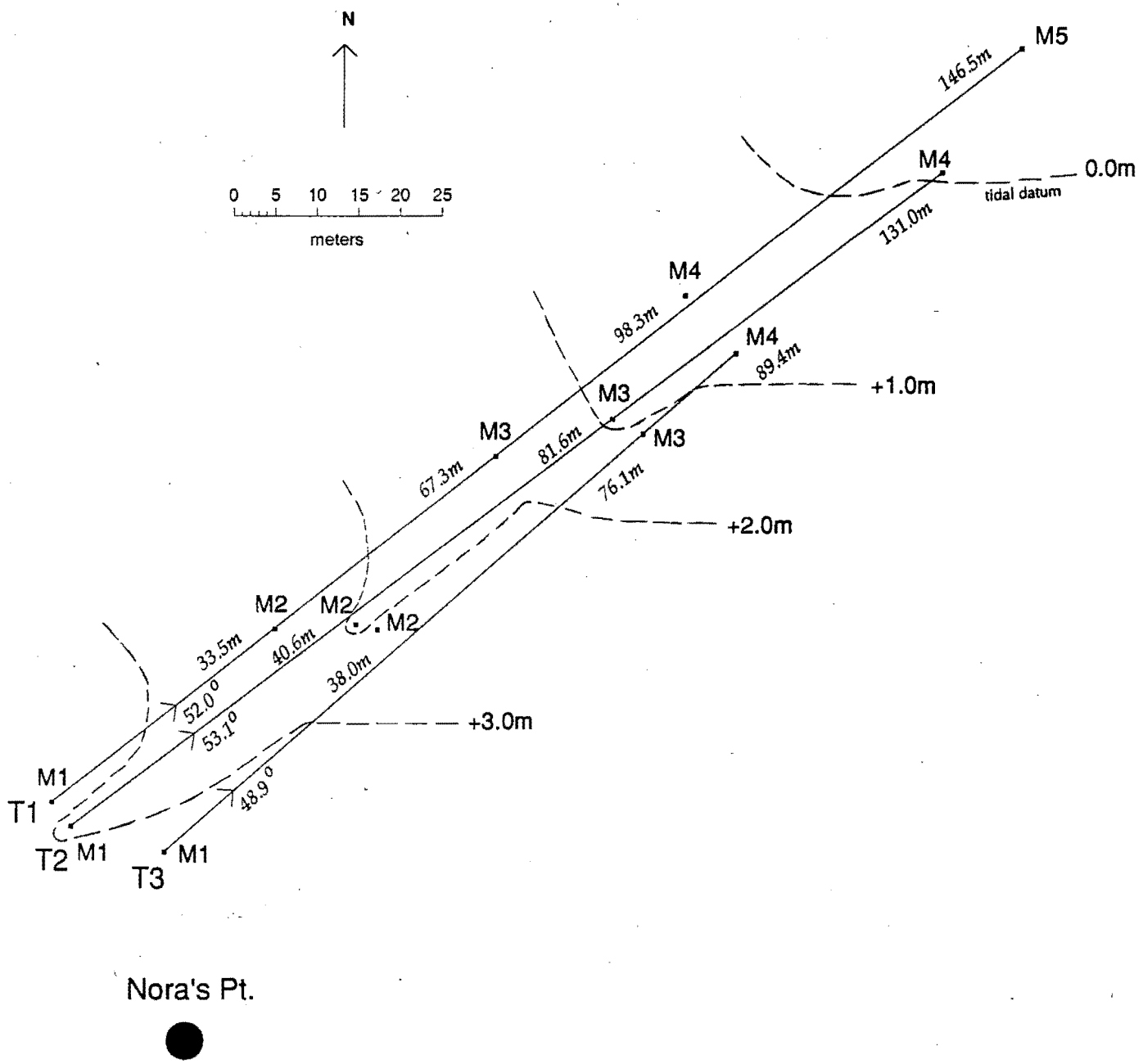
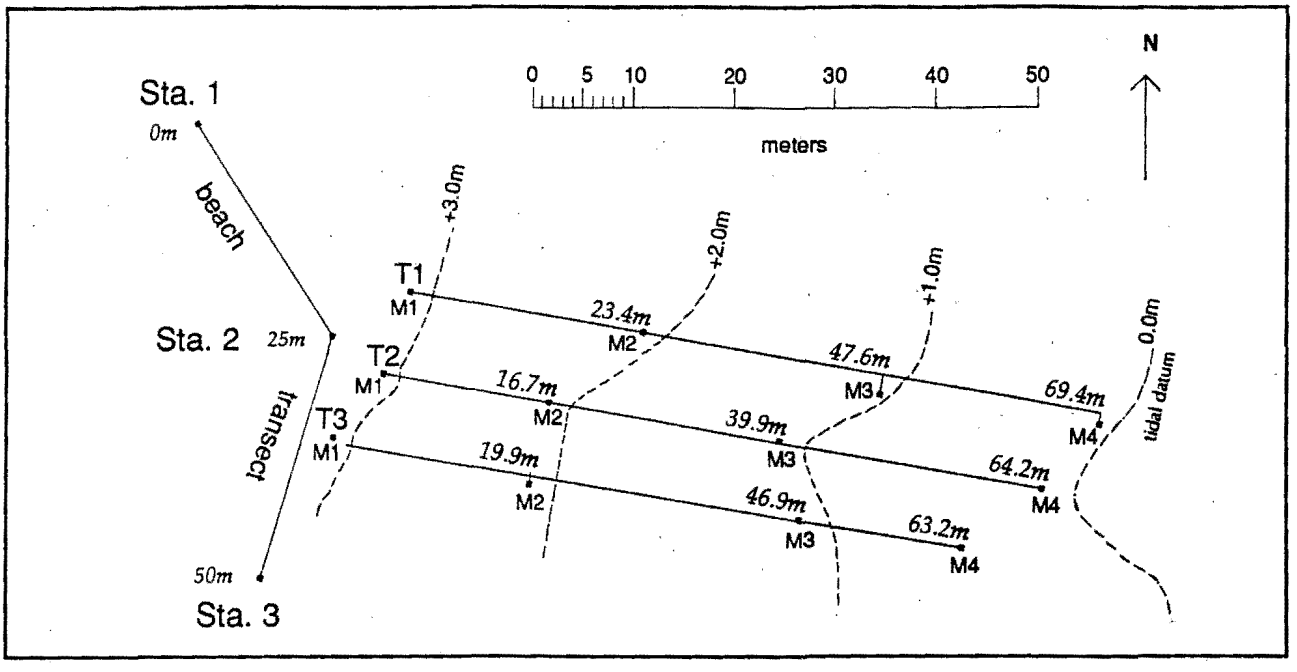
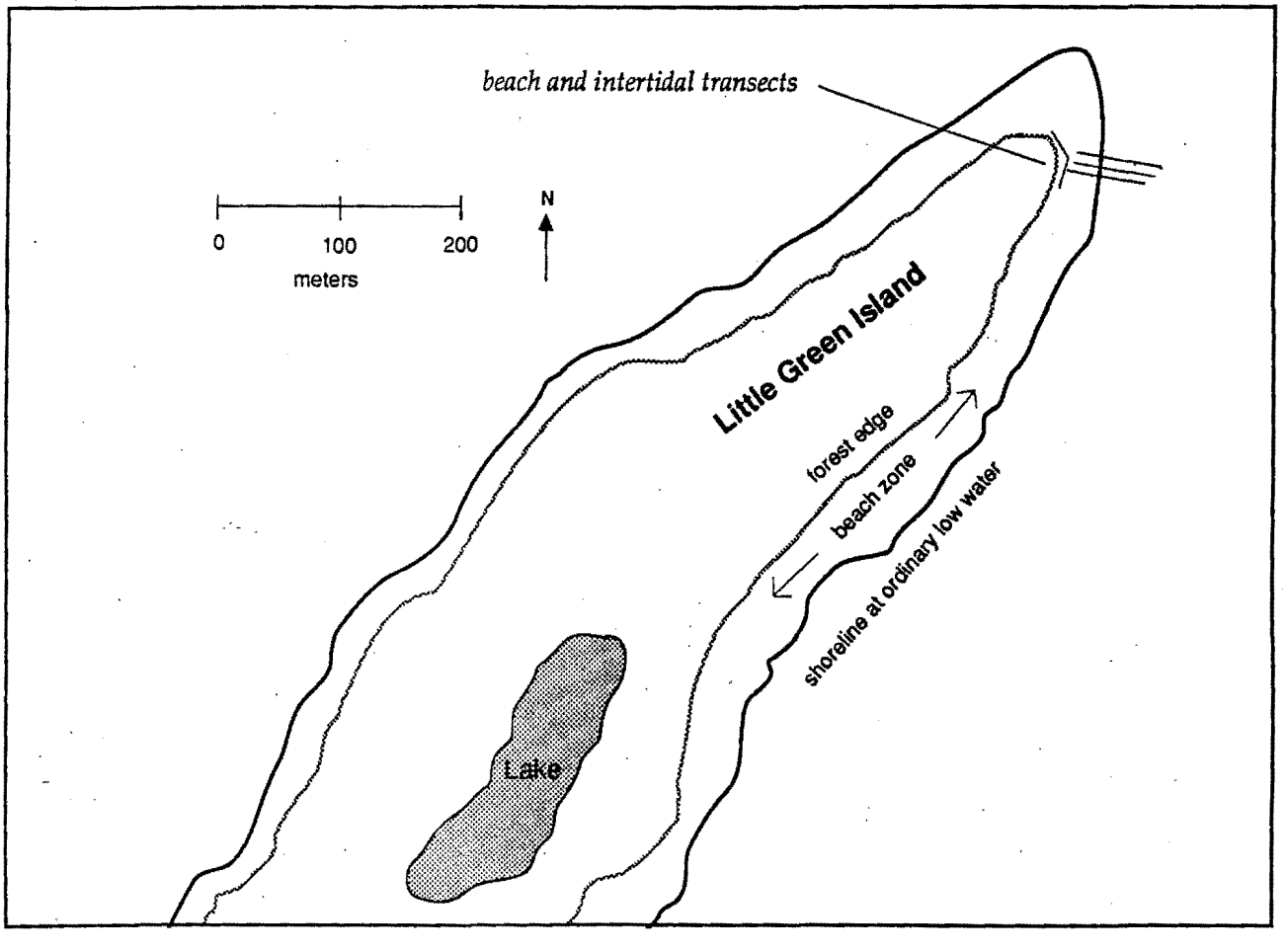


Figure 4C. GREEN ISLAND INTERTIDAL TRANSECTS AT LITTLE GREEN ISLAND





2) The recolonization of intertidal organisms, especially barnacle sets and *Fucus* plants, was underway,

3) Changes in the intertidal community, especially delayed mortality probably due to the oil spill, were still occurring in 1990, so that both recovery and oil spill effects were interacting, and

4) Remobilization of buried oil may cause additional damage, although the risk in our study area would not be as great as leakage from unweathered oil sealed in fine sediments.

Appendix 1 is a list of the species we encountered in intertidal habitats in 1986 compared to 1989. A nearly complete vascular plant flora, including shoreline and upland nearshore habitats, has been developed for the RNA Establishment Record. Eyerdam (1971) provided a list of terrestrial shoreline species encountered in the second growing season following the 1964 earthquake uplift of Green Island.

Proposed Project Approaches and Methods

A: Project overview

There are three main elements to successful data collection in a biotic monitoring project:

1) establishing high-resolution spatial control in order to be able to relocate individual small areas and organisms,

2) positively identifying species to ensure that changes seen between monitoring dates are properly assigned among species, and

3) quantifying the abundance of species.

We propose to be involved in the project ourselves, to develop a Ph.D.-level graduate thesis project in cooperation with the Institute of Marine Science at the University of Alaska Fairbanks, to involve the newly hired UAF faculty Geographic Information Systems (GIS) specialist , and hire field and lab assistants to be involved in the work (see Budget for details).

To date our Green Island project has concentrated on tasks 1 and 2; we propose to expand that work at Green Island and establish an unoiled control site on Hinchinbrook Island. We have been impressed with the dynamic forces in the surf zone and have already experienced a significant loss of our permanent plot markers. Rehabilitation of markers is an important continuing task.

Our monitoring involves 3 separate projects:

intertidal transects
beach zone mapping
beach profile deposition

To accomplish our objectives we have identified 5 project tasks. Figure 5 shows the relative work effort and scheduling for the tasks.

1. Update beach and intertidal transects. We propose to monitor our original transects in field season 1992, and thus be able to immediately begin to report some results. We will establish spatial control on the study locations by registering control points from Global Positioning Satellite (GPS) receivers. Intensive study locations will be grided and entered into the Arc Info GIS system.

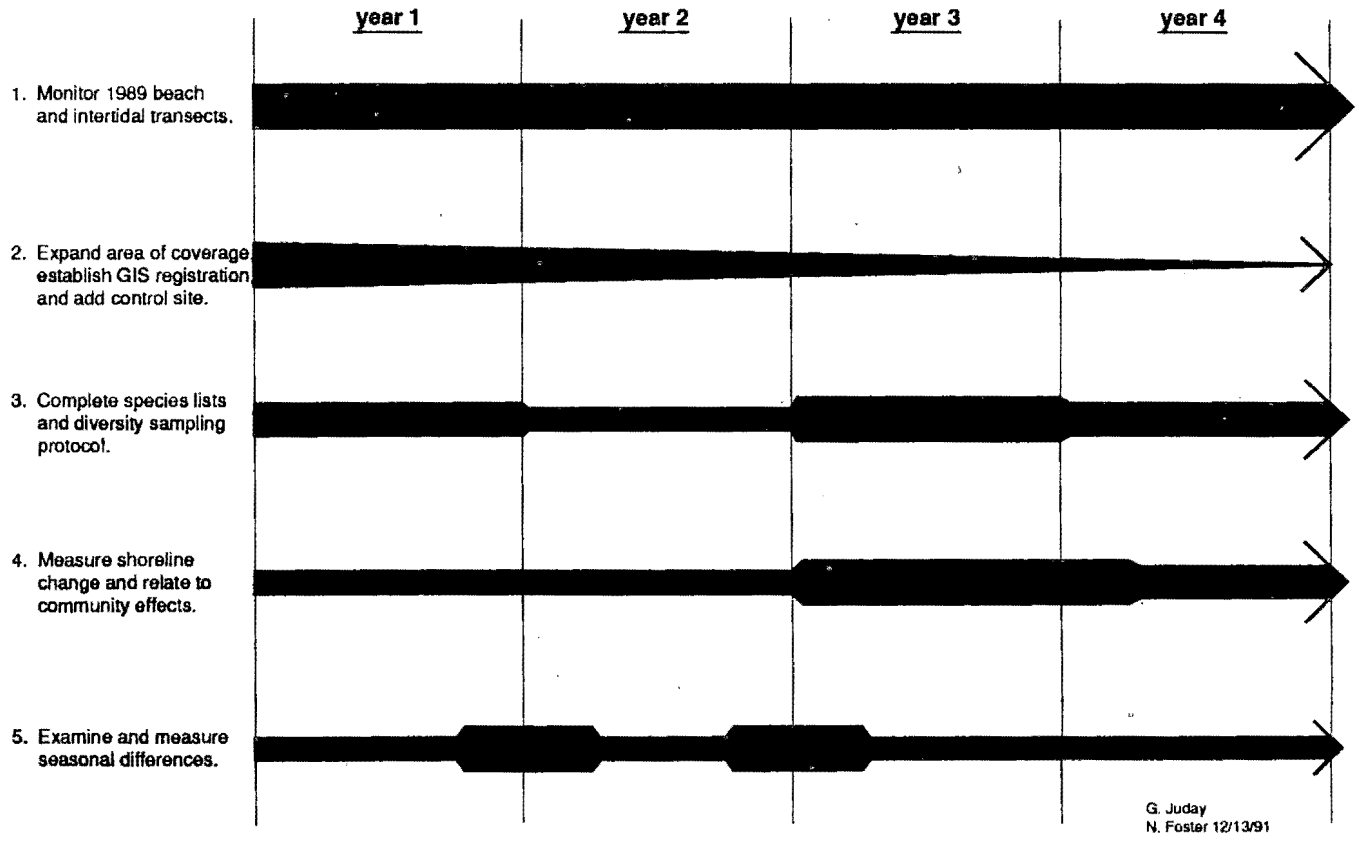
2. Expand the area of coverage and obtain and unoiled control site. A serious drawback to our existing data base is the lack of an unoiled control site. We have identified a suitable area on Hinchinbrook Island and propose to establish a replicate monitoring installation early on in the project. We also are convinced of the need to expand the size of the plots we are monitoring to collect more data for the field effort and to overcome a large natural variability term.

3. Complete a biosystematic survey, species lists, and design a protocol to resample with the same intensity for the future. A master species list is a cumulative product, but we believe it is necessary to design a species diversity sampling protocol that can be repeated at intervals with some confidence of comparability.

4. Measure beach dynamics and shoreline change. The development of gravel beaches is poorly understood (Sherman 1991) as is the effect of beach dynamics on plants and animals of the Alaska coast. We propose to document rates of accretion in relation to species dynamics. The movement and fate of gravel has major implications for buried pockets of oil and oil degredation products.

5. Investigate winter and spring conditions. We have observed already the dramatic differences between summer and winter beach conditions. We believe that fall/winter site visits are necessary to observe and document some of the forces and immediate effects of winter storms.

Figure 5 PROPOSED MONITORING PROJECT SCHEDULE, BIOLOGICAL DIVERSITY AND INTERACTIONS AT GREEN ISLAND



B: Monitoring methods

Shorelines

A coordinate reference system will be established and marked along 300 meters of beach at Green Island. Characteristics of dunegrass and other shoreline vegetation communities will be measured. Patterns of mortality will be mapped. Abundance/cover data of intertidal and beach organisms will be calculated. We will complete detailed mapping of the horizontal location of surface features. We will compare the distribution of drift material, loose boulders, vegetation patches, and oil or tar pools or mats over a multi year period and report on the major interactions, especially any abnormalities that appear related to oil.

Intertidal transects

We will follow the methods of Jones et al. (1980) for monitoring rocky intertidal sites. We will obtain quantitative measures of cover/abundance through direct observation and sequential photography. We will expand the coverage of plots in our existing transects (figure 4A, 4B, 4C) to an area that will allow characterization of the entire community and statistically valid estimation of the abundance of special species.

Special target species will be closely monitored within the transects and surrounding area because of their known important ecological roles elsewhere. A working list will be developed early in the project and adjusted as results dictate. Candidate species include the following:

The surfgrass *Phyllospadix serrulatus* (Photo 2), blue mussel *Mytilus edulis* (Photo 4), and brown rockweed *Fucus garderni*, three of the species that appear to have sustained the heaviest damage from the oil spill in our area.

The seastars *Pisaster ochracea* and *Evasterias troschelli*. The first is one of the most conspicuous animals along much of the Pacific coast intertidal zone (Photo 6) where it has a major effect through predation (Paine 1974) on barnacles, snails, limpets, and chitons.

The snails *Nucella lamellosa* and *N. lima*, and the nudibranch *Onchidoris bilamellata*. The first species is a regulator of marine community structure (e.g. Spight 1982).

The grazers *Strongylocentrotus droebachiensis* and *Katherina tunicata*. The second species is a significant herbivore in the region (Himmelman 1978).

C: Taxonomic Studies

The common or dominant organisms in the rocky intertidal zone (e.g. mussels, barnacles,

limpets and other gastropods, and seastars) are sufficiently well known that an experienced or adequately trained observer can determine them in the field. We will extend our surveys for new organisms to our master list to the point of diminishing returns - that is when the effort invested in locating new species is not worth the extensive amount of time invested (asymptotic portion of the species-area curve). Voucher specimens will be collected to meet four proposed tasks.

To verify the identification of species (e.g. small mollusks, crustaceans, and lesser-known algae) that cannot be determined in the field;

To contribute to a permanent archive at the University of Alaska Museum documenting the biological diversity of Prince William Sound;

To make observations on feeding through examining stomach contents, where possible; and

To look for organisms not previously documented in the region to expand knowledge of the ecology and biogeography of the area.

Voucher specimens will be identified and archived. Permanent photo monitoring locations will be established.

D: Beach Dynamics

We will develop an annual 3-dimensional profile of an accreting gravel beach that received oil to determine representative rates of burial and sequestration at Lunch Point on Green Island. The field survey will consist of relative elevation measures using plumb lines from grid points taken from parallel tapelines running perpendicular to a permanent 25 meter segment of beach transect. Later in the project we will attempt to identify stranded oil or tar zones at risk of exposure from erosional beaches. This project is not intended as a major stand-alone effort, but as an integrated part of our biotic monitoring activities. As a result we do not intend to adopt high precision/efficiency survey methods to cover large areas.

E: Hydrocarbon Analyses

Analyses of hydrocarbons is expensive ($500 to multiples per sample) and should be related to some specific question. We will arrange for analysis of suspected toxic fractions of samples collected in areas of biotic abnormalities or areas where erosion or other transfer processes appear capable of remobilizing oil or oil residues.

Hypotheses

Once some of the major foodweb relationships are determined by field observation, we will set up experiments to determine the relationship between trophic interactions and zonation and diversity. Competition and predation are known to be major factors in the ecological community organization of rocky intertidal ecosystems (Paine 1966). Basic information on community structure can be inferred from and described by characteristic trophic and competition interactions. We will look for evidence of documented plant/herbivore, prey/predator, and detritus/ detritivore interactions that are known from rocky shores of Alaska (see O'Clair and Zimmerman 1987, for a review of Alaskan studies). We will explore the feasibility of selected species removals and/or additions.

VanBlaricom (1987) demonstrated that mollusks and bivalves on Green Island are restricted to crevice refuges (Photo 7) where sea otters are not able to pry them off the rocks. The mass mortality of sea otters around Green Island has major implications for the community structure (Estes and Palmisano 1974), and we will use whatever information is released on the population recovery of sea otters.

Our three working hypotheses at this point are:

1. Mollusks and bivalves formerly restricted to crevice refuges on Green Island will successfully colonize exposed habitats, reducing the abundance of formerly dominant primary producers.

2. Simultaneous mass mortality disrupted the natural patch dynamic regime of disturbance in rocky intertidal habitats and is leading to a uniform, locally less diverse community structure in the area affected by the *Exxon Valdez* spill.

3. Opportunistic green filamentous algae will occupy growing space released by delayed mortality of the pre-spill organisms (Photo 8). To the degree that the green algae persist in local habitat patches in the 1993-1996 time period they are indicators of continuing, local chronic oil injury.

Reporting

Diversity is not a characteristic that typically changes over short time intervals except during unusual events such as oil spills, extreme weather events, or earthquake uplift. We propose to report annually to the *Exxon Valdez* Trustee Council on progress of project management and execution,and on substantive results in an annual report. We anticipate preparing journal articles for publication, and participating in scientific and oil spill meetings. We will work with the Publications office of the UAF Agricultural and Forestry Experiment Station to prepare popular publications describing results of the project. In the event of another spill or extreme climatic event we would be "on call" to examine the implications for our monitoring project.

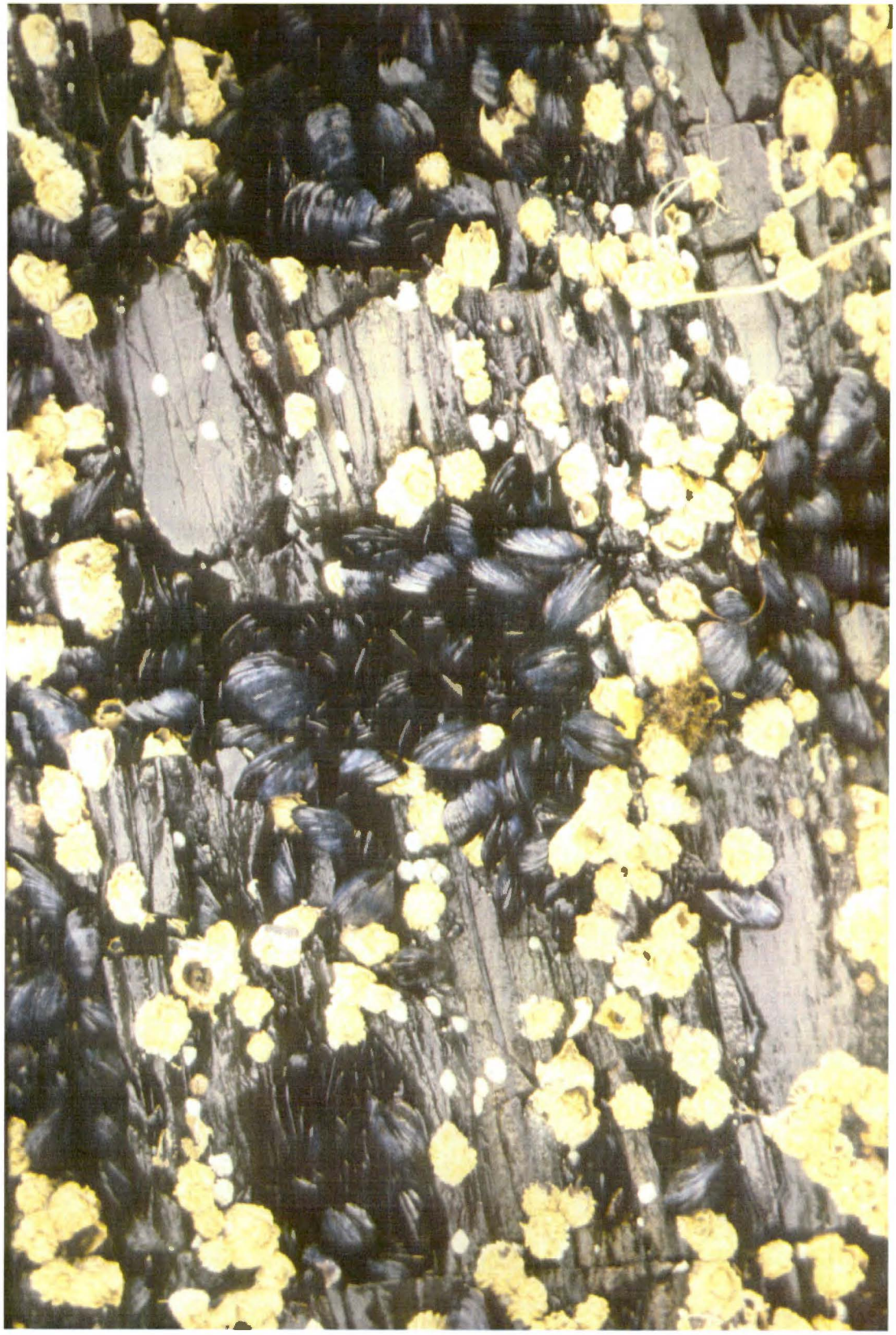


Photo 7. Blue mussels at Green Island are restricted to crevices in the rock where sea otters are unable to pry them off. With the mass die-off of sea otters this community should change significantly.

Photo 8. Filamentous green algae colonizing a dead colony of acorn barnacles at Green Island, July 1990.

Literature Cited

Calkins, D.G., Pitcher K.W., and K. Schneider. 1975. Distribution and Abundance of Marine Mammals in the Gulf of Alaska. Alaska Department of Fish and Game, Division of Game; Juneau, AK. 67 p.

Callahan, J.T. 1984. Long-term ecological research. Bioscience 34:363-367.

Chanin, Paul. 1985. The Natural History of Otters. Facts on File. New York. 179 p.

Davis, Gary E. 1989. Design of a Long-Term Ecological Monitoring Program for Channel Islands National Park, California. Natural Areas Journal 9(2): 80-89.

Duggins, D.O., Simenstad, C.A., and J.A. Estes. 1989. Magnification of Secondary Production by Kelp Detritus in Coastal Marine Ecosystems. Science 245: 170-173.

Dumoulin, Julie A. 1987. Sandstone composition of the Valdez and Orca Groups, Prince William Sound, Alaska. Washington, D.C. U.S. Department of the Interior, Geological Survey. Bulletin 1774. 37 p.

Estes, J.A., and J.F. Palmisano. 1974. Sea otters: their role in structuring nearshore communities. Science 185: 1058-1060.

Eyerdam, W.J. 1971. Flowering plants found growing between pre- and post-earthquake high-tide lines during the summer of 1965 in Prince William Sound. p 69-81 In The great Alaska earthquake of 1964 Biology. National Academy of Sciences, Washington, D.C.

Foster, N.R. 1987. Range extension for *Diodora steinbergae* (Lance, 1962) to Prince William Sound, Alaska. Veliger 30(1): 97-98.

Galt, J.A., and D.L. Payton. 1990. Movement of Oil Spilled from the T/V *Exxon Valdez*. Pp 4-17 In: K. Bayha and J. Kormendy (tech. coords.) Sea Otter Symposium: Proceedings of a symposium to evaluate the response effort on behalf of sea otters after the T/V *Exxon Valdez* oil spill into Prince William Sound. Anchorage, AK, 17-19 April 1990. U.S. Fish and Wildlife Service, Biological Report 90(12).

Garshelis, D.L. 1983. Ecology of Sea Otters in Prince William Sound, Alaska. University of Minnesota. Ph.D. Thesis. 321 p.

Garshelis, D.L. 1984. Age Estimation of Living Sea Otters. Journal of Wildlife Management. 48(2): 456-463.

Garshelis, D.L. and D.B. Siniff. 1983. Evaluation of Radio-Transmitter Attachments for Sea Otters. The Wildlife Society Bulletin 11(4): 378-383.

Garshelis, D.L. and J.A. Garshelis. 1984. Movements and Management of Sea Otters in Alaska. Journal of Wildlife Management 48(3): 665-678.

Garshelis, D.L., Johnson, A.M., and J.A Garshelis. 1984. Social organization of sea otters in Prince William Sound, Alaska. Canadian Journal of Zoology 62(12): 2648-2658.

Garshelis, D.L., Garshelis, J.A., and A.T. Kimker. 1986. Sea Otter Time Budgets and Prey Relationships in Alaska. Journal of Wildlife Management 50(4): 637-647.

Himmelman, J. 1978. The reproductive cycle of *Katharina tunicata* Wood and its controlling factors. Journal of Experimental Marine Biology and Ecology 31: 27-41.

Irons, D.B., Nysewander, D.R., and J.L. Trapp. 1988. Prince William Sound Sea Otter Distribution in Relation to Population Growth and Habitat Type. U.S. Fish and Wildlife Service, Branch of Marine Ecology and Wildlife Assistance Marine Bird Project. Anchorage, AK. 31 p.

Isleib, M.E., and B. Kessel. 1973. Birds of the North Gulf coast - Prince William Sound region, Alaska. Biological Papers of the University of Alaska, Number 14. 149 p.

Johnson, A.M. 1987. Sea Otters of Prince William Sound, Alaska. Alaska Department of Fish and Game. Anchorage, AK. Unpublished Report. 87 p. plus maps.

Jones, W.E., Bennell, S., Beveridge, C., McConnell, B., Mack-Smith, S., Mitchell, J., and A. Fletcher. 1980. Methods of Data Collection and Processing in Rocky Intertidal Monitoring. Pp. 137-170, Chapter 5 In: Price, J.H., Irvine, D.E.G., and W.H. Farnham (eds.). The Shore Environment, Volume 1: Methods. New York, NY. Academic Press. 321 p.

Juday, Glenn Patrick. 1987. Selecting Natural Areas for Geological Features: A Rationale and Examples from Alaska. Natural Areas Journal 7(4): 137-156.

Juday, Glenn Patrick, and Nora Foster. 1990. A Preliminary Look at Effects of the *Exxon Valdez* Oil Spill on Green Island Research Natural Area. Agroborealis 22(1): 10-17.

Juday, Glenn Patrick, and Nora Foster. 1991. A Return to Green Island. Agroborealis 23(1): 26-28.

Kenyon, K.W. 1969. The Sea Otter in the Eastern Pacific Ocean. North American Fauna, Number 68. USDI Bureau of Sport Fisheries and Wildlife. Washington, D.C. 352 p.

Kessel, Brina, and Daniel D. Gibson. 1978. Status and Distribution of Alaska Birds. Studies in Avian Biology, Number 1. 100 p. plus plates.

Lethcoe, Jim. 1990. An Observer's Guide to the Geology of Prince William Sound. Valdez, AK. Prince William Sound Books. 224 p.

O'Clair, C. E., and S.T. Zimmerman. Biogeography and ecology of intertidal and shallow subtidal communities. Chapter 11: In: Hood, D.W. and S.T. Zimmerman (eds.) The Gulf of Alaska: Physical Environment and Biotic Resources. OCS study MMS 86-0095.

Orians, Gordon H, 1986. Ecological knowledge and environmental problem-solving: concepts and case studies. National Research Council Committee on Applications of Ecological Theory to Environmental Problems. Washington, D.C. National Academy Press. 388 p.

Paine, R.T. 1966. Food web complexity and species diversity. American Naturalist 100: 65-75.

Paine, R.T. 1974. Intertidal community structure: experimental studies on the relationship between a dominant competitor and its principal predator. Oecologia 15: 93-120.

Pitcher, K.W. 1989. Harbor seal trend count surveys in southern Alaska, 1988. Final Report Contract MM4465852-1 to U.S. Marine Mammal Commission, Washington, D.C. 15 pp.

Pitcher, K.W., and J.S. Vania. 1973. Distribution and Abundance of Sea Otters, Sea Lions, and Harbor Seals in Prince Williams Sound, Summer 1973. Alaska Department of Fish and Game, Game Division. Preliminary Report. Anchorage, AK. 17 p. plus maps.

Plafker, George. 1969. Tectonics of the March 27, 1964, Alaska earthquake. Washington, D.C.: Government Printing Office. U.S. Geological Survey Professional Paper 543-I. 74 p.

Plafker, George. 1990. Regional Vertical Tectonic Displacement of Shorelines in South-central Alaska During and Between Great Earthquakes. Northwest Science 64(5): 250-258.

Price, J.H., Irvine, D.E.G., and W.H. Farnham (eds.). 1980. The Shore Environment, Volume 1: Methods. The Systematics Association Special Volume No. 17(a). New York, NY. Academic Press. 321 p.

Prince William Sound Science Center. 1991. Research for the 1990's in Prince William Sound and the Copper River Delta. Prince William Sound Science Center. Cordova, AK. Proceedings of the Conference of March 1-3, 1990. 40 p.

Ricketts, E., Calvin, J., Hedgpeth, J. (revised by Phillips, D.). 1985. Between Pacific Tides. Stanford University Press. 652 p.

Sherman, Douglas J. 1991. Gravel Beaches. National Geographic Research and Exploration 7(4): 442-452.

Spight, T.M. 1982. Population sizes of two marine snails with a changing food supply. Journal of Experimental Marine Biology and Ecology 57: 195-217.

Sowls, A.L., Hatch, S.A., and C.J. Lensink. 1978. Catalog of Alaskan Sea Bird Colonies. U.S. Department of the Interior, Fish and Wildlife Service. Anchorage, AK. Biological Services Progress Report FWS/OBS-78/78.

Trustee Council. 1991. The 1991 State/Federal Natural Resource Damage Assessment and Restoration Plan for the *Exxon Valdez* Oil Spill. Volume I: Assessment and Restoration Plan, Appendices A, B, C. 288 p.

USDA Forest Service. 1984. Land and Resource Management Plan Chugach National Forest. USDA Forest Service; Anchorage, AK. Alaska Region Administrative Document 127B (sections numbered separately).

VanBlaricom, G.R. 1987. Regulation of Mussel Population Structure in Prince William Sound, Alaska. National Geographic Research. 3(4): 501-510.

PROJECT BUDGET

YEAR 1

CO-PIs	work mo.	cost
Ecologist	1.5	$15,109
Taxonomic specialist	1.5	$7,376
FIELD & LAB ASSISTANTS		
Field crew/GIS leader	4	$13,818
Field crew	4	$6,286
Graduate Student (1)	2	$14,400
TRAVEL-LOGISTICS		$10,000
SUPPLIES		$2,000
EQUIPMENT		$12,000
Overhead @ 47% [a]		$32,425
Year 1 total		$113,414

YEAR 2

CO-PIs	work mo.	cost
Ecologist	1.5	$15,562
Taxonomic specialist	1.5	$7,597
FIELD & LAB ASSISTANTS		
Field crew/GIS leader	4	$14,233
Field crew	4	$6,286
Graduate Student (1)	2	$14,400
TRAVEL-LOGISTICS		$11,000
SUPPLIES		$3,000
EQUIPMENT		$7,000
Overhead @ 47% [a]		$33,877
Year 2 total		$112,955

YEAR 3

CO-PIs	work mo.	cost
Ecologist	1.5	$16,029
Taxonomic specialist	1.5	$7,825
FIELD & LAB ASSISTANTS		
Field crew/GIS leader	4	$14,660
Field crew	4	$6,286
Graduate Student (1)		$14,400
TRAVEL-LOGISTICS		$10,000
SUPPLIES		$2,000
EQUIPMENT		$12,000
Overhead @ 47% [a]		$33,464
Year 3 total		$116,664

YEAR 4

CO-PIs	work mo.	cost
Ecologist	1	$10,986
Taxonomic specialist	1	$5,363
FIELD & LAB ASSISTANTS		
Field crew/GIS leader	4	$15,101
Field crew	4	$6,286
Graduate Student (1)		$14,400
TRAVEL-LOGISTICS		$11,000
SUPPLIES		$3,000
EQUIPMENT		$3,000
Overhead @ 47% [a]		$31,084
Year 4 total		$100,220

PROJECT TOTAL $443,253

[a] indirect costs not assessed on equipment.

Support Costs

A. Maximum of 7 people in field (boat or shore camp) for 2 work weeks, 3 technicians on site for 1 month continuously, plus misc. site work. Total of 170 work days in field.

B. Transportation from Valdez to Green Island and return for 7 people during main site documentation visit, 2 additional round trips for 3 technicians, plus short-term site work for 3 investigators. Total of 24 trips Valdez-Green Island (boat or air) plus occasional aerial reconnaissance.

C. 3 to 5 soil/plant hydrocarbon samples per year

APPENDIX 1--COMPOSITE INTERTIDAL SPECIES LIST FOR GREEN ISLAND RNA

Phylum and Species	1989 LG	1989 NP	1989 LP	1986 GI-1	1986 GI-5
PORIFERA					
unidentified sponge			x	x	
COELENTERATA					
Utricina crassicornis		x		x	
Anthopleura sp				x	
RHYNCOCOELA					
unidentified nemertean			x		x
MOLLUSCA					
Acmaea mitra			x	x	x
Acmaea sp.				x	
Tectura persona	x	x		x	x
Tectura scutum	x		x		
Lottia borealis				x	
Lottia pelta	x	x	x	x	x
Lottia ochracea					x
Lottia sp.	x	x	x		x
Lepetidae	x	x			
Margarites beringensis				x	
Margarites pupillis	x			x	x
Calliostoma ligatum					x
Littorina scutulata	x	x	x	x	x
Littorina sitkana	x	x	x	x	x
Lacuna sp.	x		x	x	x
Alvinia sp.				x	
Barleeia subtenuis				x	
Crepidula perforans				x	
Crepipatella lingulata				x	
Trichotropis cancellata				x	
Cerithiopsis sp.		x			
Opalia? sp.		x			
Nucella lamellosa	x	x		x	x
Nucella lima		x	x		x
Boreotrophon multicostatus	x	x			x

Appendix 1 (continued)--Composite Intertidal species list for Green Island RNA

Phylum and Species	LG	NP	LP	GI-1	GI-5
MOLLUSCA (continued)					
Ocenebra interfossa	x				x
Searlesia dira	x	x	x	x	x
Mitrella sp.	x	x		x	
Olivella baetica		x			
Granulina margaritula					x
Amphissa columbiana					x
Acteocina sp.					x
Hermassenda crassicornis					x
Onchidora muricata					x
Onchidoris bilamellata					x
Acanthodoris nanaimoensis					x
unidentified opisthobranch	x				
Onchidella borealis	x				
Siphonaria thirsites	x				
Mytilus edulis	x	x	x		x
Musculus discors				x	
Musculus sp.					x
Chlamys sp.				x	
Modiolus modiolus		x			
Pododesmus macrochisma		x		x	x
Diplodonta impolita					x
Saxidomus gigantea		x		x	x
Protothaca staminea		x			
Gari californica		x			
Hiatella arctica		x		x	x
Agriodesma saxicola		x			
Katherina tunicata	x	x	x		
Tonicella lineata	x	x			x
Tonicella rubra					x
Tonicella insignis					x
Mopalia spectabilis	x				
Mopalia sp.	x	x			x
Cryptochiton stelleri		x			x
ARTHROPODA					
unidentified mite		x			x
Semibalanus glandula	x	x	x	*	*

Appendix 1 (continued)--Composite Intertidal species list for Green Island RNA

Phylum and Species	LG	NP	LP	GI-1	GI-5
ARTHROPODA (continued)					
Semibalanus cariosus	x	x	x	x	x
Balanus balanoides	x	x	x	*	*
Chthamalus dalli	x	x	x	x	x
Idotea wosnessenski	x	x		x	x
Gnorimosphaeroma oregonensis	x			x	x
Pagurus hirsiutiusculus	x			x	
Pagurus sp.	x	x		x	x
Pugettia gracilis		x	x	x	x
Lophopanopeus bellus		x		x	x
Cancer oregonensis					x
Hapalogaster sp.					x
Phyllolithodes papillosus					x
Cryptolithodes sitkensis					x
Hippolytidae					x
unid. amphipoda	x			x	x
unid. caprellids					x
ECHINODERMATA					
Pycnopodia helianthoides	x	x	x	x	x
Leptasterias hexactis	x	x			x
Pisaster ochracea	x	x	x		
Evasterias troschelli		x			
Henrecia sp.		x			x
Dermasterias imbricata			x	x	
Orthasterias kohleri				x	x
Solaster sp.				x	
ophiuroid					x
Strongylocentrotus droebachiensis	x	x		x	x
Strongylocentrotus sp.				x	
Strongylocentrotus franciscanus					x
Cucumaria sp.	x				
ANNELIDA					
Serpulidae	x	x	x	x	x
Spirorbidae	x	x	x	x	x
Polynoidae	x			x	x
Syllidae	x				

Appendix 1 (continued)--Composite Intertidal species list for Green Island RNA

Phylum and Species	LG	NP	LP	GI-1	GI-5
ANNELIDA (continued)					
Nereidae				x	
BRYOZOA					
Cryptosula okadai	x			x	
Scrupocellaria sp.				x	
Hippothoa hyalina				x	x
other cheilostomes	x	x	x	x	x
Membranipora membranacea					x
Heteropora sp.		x			
ASCIDEA					
unidentified		x			x
CHORDATA					
Pholadidae	x				x
Cottidae	x	x		x	x
ALGAE					
Fucus gardneri	x	x	x	x	x
Leathesia difformis	x	x	x	x	x
Chordaria flagelliformis	x	x		x	x
Alaria sp.	x				
Laminaria sp.	x				x
laminarians		x			
Endocladia muricata				x	x
Soranthera ulvoidea	x				
Ralfsia fungiformis	x	x	x		
Scytosiphon lomentaria					x
Pleurophycus gardneri					x
Costaria coststa					x
unidentified	x				
Codium fragile	x				
Ulva or Monostroma		x	x	x	x
Enteromorpha sp.		x		x	x
unidentified fillamentous green		x	x	x	x
Rhodolela/Neorhodomela	x	x	x	x	x
Palmaria sp.	x	x	x	x	x

Appendix 1 (continued)--Composite Intertidal species list for Green Island RNA

Phylum and Species	LG	NP	LP	GI-1	GI-5
ALGAE (continued)					
Halosaccion sp.	x	x	x	x	x
corallines	x	x	x	x	x
encrusting calcareous	x	x	x	x	x
Polysiphonia sp.	x	x	x		x
Ptilota sp.	x	x	x	x	x
Constantinea sp.		x	x	x	
Hildenbrandia				x	
Odonthallia floccosa				x	
Cryptosiphonis woodii				x	
VASCULAR PLANT					
Phyllospadix serrulatus	x			x	x
x					

APPENDIX 2

CURRICULUM VITAE

Name: **Glenn Patrick Juday**

Rank **Assistant Professor of Forest Ecology:** Date of Appointment 07/01/87

Education: **B.S. summa cum laude**, 1972, Forest Management, Purdue University, West Lafayette, IN.
Ph.D., 1976, Plant Ecology, Oregon State University, Corvallis, OR
Dissertation topic: The Location, Composition and Structure of Old-Growth Forests of the Oregon Coast Range.

Post-Doctoral Fellowship in Environmental Affairs, 1976-1977, (Rockefeller Foundation) Oregon State University; Executive Chairman of the Oregon Natural Area Preserves Advisory Committee.

Field of Specialization and Areas of Interest

Analysis of landscape-level processes responsible for natural diversity
Long-term environmental monitoring
Structure of old-growth forest ecosystems
Definition and identification of elements of natural diversity
Natural area protection and management

Selected Research Reports and Papers

Juday, Glenn Patrick. 1991. Ten Years of Successional Change on the Hugh Miller Inlet Plots, Glacier Bay National Park. Contract Report to Alaska Region, National Park Service, # CA-9700-0-9011. 35 p. plus 18 numbered figs., 5 appendices.

Juday, G.; Yarie, J.; and Van Cleve, K., Adams, P., Viereck, L., Dyrness, C.T. 1990. Bonanza Creek Experimental Forest LTER Field Trip Guide. International Conference on the Role of the Polar Regions in Global Change, June 15, 1990. University of Alaska Fairbanks and Institute of Northern Forestry, USDA Forest Service. Fairbanks, AK. 26p.

Juday, Glenn Patrick, and John C. Zasada. 1985. The Structure and Development of an Old-Growth White Spruce (Picea glauca (Moench) Voss) Forest on an Interior Alaska Floodplain Site, Willow Island. pp 227-234. in Meehan, W.R., T.R. Merrell, Jr., and T.A. Hanley (Eds) Fish and Wildlife Relationships in Old-Growth Forests: Proceedings of a symposium held in Juneau, Alaska, 12-15 April 1982. American. Institute of. Fish. Research. Biologists. 425p.

Research Reports and Papers (continued)

Juday, Glenn Patrick. 1984. Temperature Trends in the Alaska Climate Record. Proceedings of the Conference on the Potential Effects of Carbon Dioxide-Induced Climatic Changes in Alaska. Ag. Exp. Sta. Misc Publication 83-1. Univ. of Alaska. pp 76 - 88.

McBeath, Jenifer H., Editor, Juday, Glenn P., Weller, Gunter, Associate Editors, and Mayo Murray, Technical Editor. 1984. The Potential Effects of Carbon Dioxide-Induced Climatic Changes in Alaska, The Proceedings of a Conference. Ag. Exp. Sta. Misc Publication 83-1. Univ. of Alaska. 208 pp.

McBeath, Jenifer H., Weller, Gunter, Juday, Glenn P., and Osterkamp, Thomas E., and Richard A. Neve'. 1984. The Potential Effects of Carbon Dioxide-Induced Climatic Changes in Alaska: Conclusions and Recommendations. Proceedings of the Conference on the Potential Effects of Carbon Dioxide-Induced Climatic Changes in Alaska. Ag. Exp. Sta. Misc Publication 83-1. Univ. of Alaska. pp 193 - 196.

Juday, Glenn Patrick. 1983. The Alaska Ecological Reserves Program: Approaches, Successes, and Problems. Transactions of the 48th North American Wildlife and Natural Resources Conference, Kansas City, MO. Wildlife Management Institute. pp 531-540.

Journal Articles

Juday, Glenn Patrick. 1991. Interview with Michael V. Finley, Superintendent, Yosemite National Park. Natural Areas Journal 11(2): 79-86.

Juday, Glenn Patrick. 1990. Interview with Jerry Franklin, Bloedel Professor of Forestry, University of Washington, and Chief Plant Ecologist, USDA Forest Service. Natural Areas Journal 10(4): 163-172.

Juday, Glenn Patrick. 1990. Interview with Dr. Robert E. Jenkins, Vice President for Science Programs, The Nature Conservancy. Natural Areas Journal 10(2): 55-60.

Juday, Glenn Patrick. 1989. Interview with Orie L. Loucks, Professor of Zoology, Miami University, and Member of the Board of Governors of The Nature Conservancy. Natural Areas Journal 9(4): 207-210.

Alaback, Paul B.; Juday, Glenn Patrick. 1989. Structure and Composition of Low Elevation Old-Growth Forests In Research Natural Areas of Southeast Alaska. Natural Areas Journal 9(1): 27-39.

Journal Articles (continued)

Juday, Glenn Patrick. 1988. State Legislative Initiatives on Natural Areas. Natural Areas Journal 8(2) p 107-114.

Juday, Glenn Patrick. 1988. Old-Growth Forests and Natural Areas: An Introduction. Natural Areas Journal 8(1) p 3-6.

Juday, Glenn Patrick. 1987. Selecting Natural Areas for Geological Features: A Rationale and Examples from Alaska. Natural Areas Journal 7(4) p 137-156.

Juday, Glenn Patrick. 1986. The Outcome of Research Natural Areas in National Forest Planning, 1986. Natural Areas Journal 6(1) p 43-53.

Juday Glenn Patrick. 1983. The Problem of Large Mammals in Natural Areas Selection: Examples from the Alaska Ecological Reserves System. Natural Areas Journal. 3(3) p 24-30.

Juday, Glenn. 1981. Type Needs for Ecological Reserves in the Forest Regional Plan for Alaska. Journal of the Natural Areas Association. 1(3) p 6-10.

Juday, Glenn Patrick. 1978. Old Growth Forests: A Necessary Element of Multiple Use and Sustained Yield National Forest Management. 8 Environmental Law. pp. 497-552. Northwestern School of Law, Portland.

Other Refereed Publications

Juday, Glenn Patrick. (in press). Alaska Research Natural Areas: 3. Serpentine Slide. USDA Forest Service General Technical Report PNW-GTR-xxx. Portland, Oregon. Pacific Northwest Research Station.

Juday, Glenn Patrick, and Nora Foster. 1990. A Preliminary Look at Effects of the Exxon Valdez Oil Spill on Green Island Research Natural Area. Agroborealis 22(1): 10-17.

Juday, Glenn Patrick. 1989. Alaska Research Natural Areas: 2. Limestone Jags. USDA Forest Service General Technical Report PNW-GTR-237. Portland, Oregon. Pacific Northwest Research Station. 58 p.

Juday, Glenn Patrick. 1988. Alaska Research Natural Area: 1. Mount Prindle. USDA Forest Service General Technical Report PNW-GTR-224. Portland, Oregon. Pacific Northwest Research Station. 34 p.

Other Refereed Publications (continued)

Juday, Glenn Patrick. 1983. Limestone Landscapes of the White Mountains. Agroborealis. Volume 15. Ag. Exp. Sta. Univ. of Alaska. pp 24-28.

Juday, Glenn Patrick. 1982. Climatic Trends in the Interior of Alaska: Moving Toward A High CO_2 World? Agroborealis. Volume 14. Ag. Exp. Sta. Univ. of Alaska. pp 10-15.

Franklin, Jerry F., Kermit Cromack, Jr., William Denison, Arthur McKee, Chris Maser, James Sedell, Fred Swanson, and Glenn Juday. 1981. Ecological Characteristics of Old-Growth Douglas-Fir Forests. USDA Forest Service General Technical Report PNW 118. 48p.

Consulting and other non-university activity

President and Past-president, Natural Areas Association, 1988, 1989 (International professional organization based in U.S. of 2,200+ people working to identify, study, protect, and manage natural areas and significant features of natural diversity).

Consultant to The Nature Conservancy National Headquarters, Science Programs Office, during special assignment, Jan. - March 1988. Conducted overview of federal natural area protection funding trends and history, natural area monitoring programs, and the application of conservation biology in natural area protection strategies.

Principal author, Research Natural Area element of Chugach National Forest Plan 1980-1981. Plan proposes 9 new Research Natural Areas designed to represent major elements of natural diversity including marine-related features and species.

Principal author, Research Natural Area element of Tongass National Forest Plan Update, 1988-1989. Plan proposes over 22 new Research Natural Areas designed to represent major elements of natural diversity, and special area designation for over 20 other areas. Several areas incorporated into new wilderness and LUD II areas established by Congress in October 1989.

Consultant to National Park Service advising and helping to launch the Resource Inventory and Monitoring initiative at both Alaska Region and national level, 1988-1990.

Consultant to various agencies on response measures to the Exxon Valdez oil spill, 1989-1991. Advised Forest Service on specific measures appropriate to Green Island Research Natural Area.

Publications In Progress

Juday, Glenn Patrick. (in prep.). Age structure and development of an old-growth white spruce forest in the Bonanza Creek LTER. [Intended submission - Canadian Journal of Forest Research].

Juday, Glenn Patrick, and John A. Bacone. (review draft) Conservation Biology of forests of the Tipton Till Plain, central Indiana. [Intended submission - Conservation Biology].

Juday, Glenn Patrick, Alan Batten, Paul Alaback, Sylvia Kelso, Carolyn Parker. (review draft). Range extensions of vascular plants from Research Natural Areas in northern Alaska . [Intended submission - Northwest Science].

Juday, Glenn Patrick, Robert Ott. (review draft). Alaska Research Natural Areas: 4. Pete Dahl Slough. USDA Forest Service General Technical Report PNW-GTR-xxx. Portland, Oregon. Pacific Northwest Research Station.

Juday, Glenn Patrick, Foster, Nora, Alaback, Paul, and Robert Ott. (review draft). Alaska Research Natural Areas: 5. Green Island. USDA Forest Service General Technical Report PNW-GTR-xxx. Portland, Oregon. Pacific Northwest Research Station.

Juday, Glenn Patrick, Paul Alaback. (in prep) Pacific silver fir in Alaska. [Intended submission - Journal of Biogeography].

Major Grant and Contract Coordinator Responsibilities

PI and Coordinator of the Alaska Ecological Reserves Program. (Cooperators include University of Alaska, USDA Forest Service PNW Exp. Sta., State of Alaska, and Alaska State Office BLM.

1982 -	$ 28,000.
1983 -	$ 36,500.
1984 -	$ 40,500.
1985 -	$ 40,500.
1986 -	$ 16,500.
1987 -	$ 46,000.
1988 -	$ 48,000.
1989 -	$ 42,500.
1990 -	$ 26,500.
1991 -	$ 45,000.

Major Grant and Contract Coordinator Responsibilities (continued)

Coordinator, Rosie Creek Fire Research Project. (cooperators include Alaska Dept. of Natural Resources, USDA Forest Service, and Univ. of Alaska.

1983 -	$ 56,000.	Coordinator
1984 -	$169,500.	Coordinator
1985 -	$ 68,825.	Coordinator
1986 -	$ 60,000.	PI
1988 -	$100,000.	PI
1990 -	$ 27,000.	PI
1991 -	$ 8,000.	PI

Coordinator, 1985 Columbia Glacier Succession Project. University of Alaska-Fairbanks, and USDA Forest Service. 1985. $22,000 ($8,000 contract plus in-kind budget).

Co-coordinator, EPA Cold Climate Research Priorities Planning Group, Univ of Alaska. EPA - Battelle Northwest. 1982. $150,000

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Institute of Marine Science

UNIVERSITY OF ALASKA FAIRBANKS
Fairbanks, Alaska 99775-1080

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JUL 16 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

9 June 1993

Dave Gibbons
Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 "G" Street
Anchorage, AK 99501

Dear Dave:

It has come to my attention that the Restoration Team is meeting to discuss the Work Plan for 1994. I have talked to several people about ideas for projects, but since there has not been an RFP of which I was made aware, we have not officially written a proposal. However, I would like to outline a project which I would like the Restoration Team to consider for 1994 and beyond. On your list of 1994 Potential Project Titles there is one called "Abundance and distribution of forage fish and their influence on recovery of injured species". I am uncertain who submitted that title, but I have been involved in many discussions regarding implementing such a study.

As you know, I sampled larval fishes in Prince William Sound in 1989. Those data are in the final stages of being written up for inclusion in the Exxon Valdez Oil Spill Symposium Proceedings. What I found was that there were several species present in Prince William Sound. In particular, walleye pollock were the most abundant larvae, followed by herring, and northern smoothtongue. Little is know about two of these three fishes in PWS. When I presented my data in Anchorage in February, it sparked much discussion with bird and mammal scientists. They wanted to know more about the forage fishes in PWS as the presence/absence and health of those fishes could be affecting recovery of birds and mammals. There were no forage fish studies conducted in relation to the oil spill so I could not answer there questions. This is a serious oversight regarding understanding recovery of the sound's populations.

The Restoration Studies provide an excellent opportunity to understand the ecology of PWS as a whole. An ecological study which links all trophic levels is needed. Forage fish are a pivotal point in such a study. They are important from a fisheries point of view (i.e., food for salmon), as well as food for birds and mammals. It is difficult to make statements about why and how a resource is or is not recovering if you ignore what is happening to its food. I have discussed this concept very seriously with Dr. Michael Fry (UC-Davis) who is intimately involved in ongoing bird recovery studies, Kathy Frost (ADF&G) who is concerned with harbor seals and Evelyn Biggs Brown (ADF&G) who heads the herring project. All have indicated a willingness to become involved in an ecosystem

study which would be designed to include forage fish, commercial fish, birds and mammals in a cohesive program, as opposed to trying to piece results together later.

Please consider including an integrated ecosystem study which jointly studies all trophic levels, including the important component linking them all - forage fish - in the 1994 Work Plan. Also, please keep me informed about what I can do to contribute to such a study. Thank you for your consideration.

Sincerely,

Brenda L. Norcross
Assistant Professor
FAX: (907) 474-7990

cc: Pam Bergman, DOI/FWS
Jerome Montague, ADF&G
John French, PAG
Michael Fry, UC-Davis
Kathy Frost, ADF&G
Evelyn Biggs Brown, ADF&G

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University of Alaska Southeast
Juneau • Ketchikan • Sitka

School of Education, Liberal Arts and Science
Juneau Campus

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

6 May 1993

Exxon Valdez Oil Spill Public Information Center,
645 "G" Street,
Anchorage, AK 99501

Dear Sirs:

Thank you for providing an opportunity for public input into the decisions of how the Exxon restoration money should be spent. I would like your board and the trustees to consider the following proposals:

1.) **Endowed Chairs in Marine Science and Economics at UA:** I agree wholeheartedly with Dr. James King that the establishment of endowed chairs at the University of Alaska has the potential for one of the best long term positive impacts on restoration. Endowed chairs for marine research at UA would attract high quality researchers, and here at UAS would also help get our fledgling Marine Biology Program off to a sound start. Fifteen chairs, divided equally among the three campuses, would cost $30 million.

2.) **Scholarships in Marine Biology and Related Fields:** I would like to see $1 million dollars given to each of the three campuses of the UA to establish undergraduate or graduate scholarships in marine sciences. This money would provide about $100,000 or so in earnings per year, which would support 20 scholarships of $5000 each. Here at UAS, such funds would be a boon to our new marine biology program.

3.) **Installation of Whale Skeletons at UAS:** Another most worthy project would be about $1 million granted to UAS to procure and display skeletons of one baleen whale and one toothed whale for educational purposes. Outdoor vandal-proof facilities could be constructed for this purpose, and could serve as an outdoor classroom. The skeletons would also be a major attraction on campus.

I hope you will give serious consideration to the above proposals, and I thank you again for the opportunity to submit these ideas.

Sincerely,

Rita M. O'Clair

Rita M. O'Clair, PhD,
Associate Professor of Biology

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

cc: John Pugh, Deany, ELAS, UAS

11120 Glacier Highway • Juneau, Alaska 99801-8671 • (907) 789-4405 • FAX: (907) 790-5224

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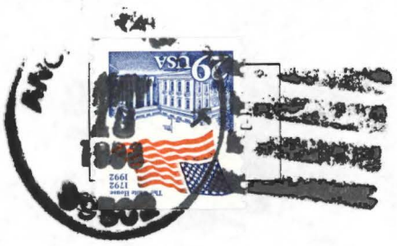

EXXON VALDEZ TRUSTEE COUNCIL
1994 Work Plan Work Group
645 "G" Street
Anchorage, Alaska 99501

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Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	08 Nov Fund

PWS=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
KOD=Kodiak Archipelago and Alaska Peninsula, OUT=Outside Oil Spill Area

93=Funded in 1993 M=Multi-year Project

Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund

PWS=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
KOD=Kodiak Archipelago and Alaska Peninsula, OUT=Outside Oil Spill Area

93=Funded in 1993 M=Multi-year Project

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
290	Technical Services	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M	X	→	→	→	→				
291		Administration	Toxicological Profile of PWS	X			$150	M	X	→	→	→	→				
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M	X	→	→						
293		Public Information	Database Integration	X	X	X	$148	M	X	→	→	→	→				
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M	X	→	→						
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M									X
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M									X
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M									X

PWS=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
KOD=Kodiak Archipelago and Alaska Peninsula, OUT=Outside Oil Spill Area

93=Funded in 1993 M=Multi-year Project

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
268	Subsistence	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									X
269		Option Not Identified	Seward Shellfish Hatchery	X	X	X	$1,300	1									X
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M	X				→				
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M	X				→				
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									X
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1									X
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									X
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M	X				→				
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M									X
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M	X				→				
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M	X				→				
280	Subtidal	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									X
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									X
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									X
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M	X		→						
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M	X		→						
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M	X				→				
286		Monitoring	Subtidal Recovery Monitoring	X	X	X	$400	M	X		→		→				
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M	X				→				
288	Technical Services	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M									X
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M									X

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															X
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									X
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M	X	→							
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M	X	→	→	→	→				
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M	X	→	→	→	→				
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M									X
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M									X
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									X
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M									X
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M									X
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									X
261	**Sport Fishing**	Recovery Monitoring															X
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									X
263		Restoration Monitoring															X
264	**Subsistence**	Access to Traditional Foods															
265		Bivalve Shellfish Hatchery															
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M									X
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1									X

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
232	**Recreation**	Visitor Center	Information Center	X	X	X	$600	1									
233		Visitor Center	Interpretation of PWS	X			$10	M									
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									
236		Visitor Center	Valdez Visitor Center	X			$850	1									
237	**River Otter**	Monitoring	River Otter Recovery Monitoring	X			$180	M									
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M									
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1									
241	**Rockfish**	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M									
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M									
243		Monitoring															
244	**Sea Otter**	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M									
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M									
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M									
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M									
249		Restoration Monitoring															

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									X
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									X
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M	X								
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									X
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									X
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									X
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									X
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1	X								
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M	X	→			→				
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1	X								
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1	X								
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M	X	→	→						
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1	X								
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1	X								
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1	X								
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									X
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									X
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									X
220		Option Not Identified	Increased Access PWS	X			$100	M	X								
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									X
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									X
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1	X								
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									X
226		Visitor Center	Cordova Environmental Education Center	X			$15	1	X								
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									X
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									X
229		Visitor Center	Environmental Education Center in PWS	X			$90	1	X								
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1	X								
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									X

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176	Pink Salmon	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M									X
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									X
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									X
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									X
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									X
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									X
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									X
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M	X	→	→	→	→				
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M	X	→	→	→	→				
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M	X	→	→	→	→				
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M	X	→	→	→	→				
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M	X	→							
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M	X	→	→	→	→				
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M	X	→	→	→	→				
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M									
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M	X	→	→	→	→				
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M	X	→	→	→	→				
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M	X	→	→	→	→				
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M	X	→	→	→	→				
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M	X	→	→	→	→				
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M	X	→	→	→	→				
197	Recreation	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M	X	→	→	→	→				
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1									X
199		Establish Marine Environmental Institute	Seward Sea Life Center	X	X	X	$40,000	1	X								
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M									
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M									

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158	**Multiple Resources**	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M	X	→	→	→	→	→	→	→	→
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M	X	→	→	→	→	→	→	→	→
160		Reduce Disturbance by Field Presence							X								
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M	X	→	→	→	→	→	→	→	→
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M									X
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M	X	→	→	→	→	→	→	→	→
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M	X	→	→	→	→	→	→	→	→
165	**Pacific Herring**	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M	X	→	→	→	→				
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M	X	→	→	→	→				
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M	X	→	→	→					
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M	X	→	→	→	→				
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M	X	→	→	→	→				
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M	X	→	→	→	→				
171		Restoration Monitoring															
172	**Pigeon Guillemot**	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M	X	→	→	→	→				
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M	X	→	→	→	→				
174		Restoration Monitoring															X
175		Temporary Predator Control															X

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128	**Multiple Resources**	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1	X								
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1	X								
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1	X								
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M	X	→	→	→	→				
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M	X	→	→						
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M	X	→	→						
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									X
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M	X	→	→	→	→				
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M	X	→	→						
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M	X	X							
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									X
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M	X	→	→	→	→				
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M	X	→	→	→	→	→	→	→	→
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M	X	→	→	→	→	→	→	→	→
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M	X	→	→	→	→	→	→	→	→
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M	X	→	→	→	→	→	→	→	→
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M	X	→	→	→	→	→	→	→	→
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M	X	→	→	→	→	→	→	→	→
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M	X	→	→	→	→	→	→	→	→
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M	X	→	→	→	→				
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M	X	→	→	→	→				

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102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M	X	→	→	→					
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M									X
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M	X	→							
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									X
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M	X	→	→	→					
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1	X								
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M	X								
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M	X	→	→	→					
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M	X	→	→						
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1	X								
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1	X								
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1	X								
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1	X								
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1	X								
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1	X								
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1	X								
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1	X								
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1									
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1									
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1									
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1									
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1									
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1	X								

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82	Intertidal	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M	X	→	→	→	→	→	→	→	
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M	X	→	→	→	→	→	→	→	
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M	X	→	→	→	→	→	→	→	
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M	X	→	→	→	→	→	→	→	
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M	X	→	→	→	→	→	→	→	
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M									
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M									
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									
92	Killer Whale	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M	X	→	→	→	→				
93		Monitoring	Recovery Monitoring	X			$125	M	X	→	→	→	→				
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M	X	→	→	→	→				
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M	X	→	→	→	→				
96	Marbled Murrelet	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M	X	→	→	→	→				
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M	X	→	→	→	→				
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M	X	→	→	→	→				
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M	X	→	→	→	→				
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M	X	→	→	→	→				

PWS=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
KOD=Kodiak Archipelago and Alaska Peninsula, OUT=Outside Oil Spill Area

93=Funded in 1993 M=Multi-year Project

Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION / SUBOPTION	POTENTIAL PROJECTS	REGION PWS	KEN	KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M	X	X	X	X	X				
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M	X	X	X	X	X				
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M	X	X	X	X	X				
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M	X	X	X	X	X				
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds															
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M	X	→	→	→	→	→	→	→	→
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M	X	→	→	→	→	→	→	→	→
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M									X
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M									X
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									X
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M									X
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									X
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									X
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M	X	→	→						
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M	X	→	→	→	→	→	→	→	→
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M	X	→	→	→	→	→	→	→	→
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M	X	→	→	→	→	→	→	→	→
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M	X	→	→	→	→	→	→	→	→
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M	X	→	→	→	→	→	→	→	→
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M	X	→	→	→	→	→	→	→	→
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M	X	→	→	→	→	→	→	→	→

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Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Ck Not Fund
42	**Common Murre**	Restoration Monitoring						M	X	X	X	X	X				
43	**Cutthroat/Dolly**	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M	X	→							
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M	X	→							
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M	X								
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									X
47		Restoration Monitoring						M	X	→							
48	**General**	Administration	Oil Spill Restoration Support.Service and Facilities	X	X	X	$600	1									
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M	X	X	X						
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1									
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M									
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M									
54		Public Information	PWS Brochures	X			$65	M									
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									
56		Public Information	PWS Large Format Photographic Book	X			$100	M									
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									
58		Public Information	PWS Video Programs	X			$100	M									
59		Public Information	Science of the Sound- Education Program	X			$53	M	X	X	X	X	X				

PWS=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Dec Rec Fund
22	**Black Oystercatcher**	Restoration Monitoring															
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M									
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M									
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M									
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M									
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M									X
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M									X
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M									X
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M	X	X	X	X	X				
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M	X	X							
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M									X

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Name: Shelli Vacca
Phone: 277-7222

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	KEN	KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	NOT FUNDED
1	**Archaeology**	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									X
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									X
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M	X	→	→	→	→	→	→	→	
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M	X	→	→	→	→	→	→	→	
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M	X	→	→	→	→	→	→	→	
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1	X								
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M	X	→	→	→	→	→	→	→	
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									X
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M	X								
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M	X	→	→	→	→	→	→	→	X
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M	X	→	→	→	→	→	→	→	X
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									X
17	**Bald Eagle**	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M									X
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M									X
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M									X
20	**Black Oystercatcher**	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M	X	→	→	→	→				
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M	X	→	→	→					

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APR 08 1993

EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

Valdez Convention & Visitors Bureau
200 Chenega St. • Valdez, Alaska 99686 • (907) 835-2984
FAX (907) 835-4845 • Toll Free 1-800-770-5954

TO Carol Fries

FROM Kathy Johnson

date 4/9/93 pages to follow 4

Comments:

The following pages are the proposal we discussed.

Thanks
Kathy

RECEIVED
OCT 02 1995

EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

March 8, 1993

Exxon Valdez Oil Spill Trustee Council
645 G Street
Anchorage, AK 99501

Charles E. Cole
Michael A. Barton
Carl L. Roster
Curtis V. McVee
John A. Sandor
Steven Pennoyer

Gentlemen:

The Exxon Valdez oil spill continues to negatively impact many people and communities in Prince William (PWS). There is a very strong need to provide the public with accurate information on the impact of the spill, the restoration efforts that are underway and have been completed, the existing conditions in PWS along with ongoing education on the environment and natural resources of PWS and the recreational opportunities which are available. To best accomplish these goals we have developed the attached proposal which would utilize Exxon Valdez settlement funds to establish and build a center for PWS oil spill and natural resource education.

Thank you for the opportunity to submit this proposal. We shall look forward to further discussing this proposal with you. In the meantime I shall remain...

Yours very truly,

T.F. Plummer

Timothy F. Plummer
Chairperson

Partnership for PWS Oil Spill & Natural Resource Education
P. O. Box 1603
Valdez, AK 99686

March 8, 1993

A CENTER FOR PRINCE WILLIAM SOUND OIL SPILL AND NATURAL RESOURCE EDUCATION

INTRODUCTION

The negative impacts of the Exxon Valdez oil spill have effected many people and communities in Prince William Sound (PWS). This impact continues as other spills in the world are immediately compared to the Exxon Valdez spill and with movies such as "Dead Ahead." This attention quickly refers to the enormity of the spill, discusses and normally shows film footage of oil on the water, dead animals and birds and all the other damage done.

The result of this continuing attention is the reinforcement of the perception that oil is still present and the Sound is no longer pristine, is not desirable as a visitor/tourist destination nor a quality place to live.

No community in Prince William Sound has been impacted more than Valdez. Some businesses are still experiencing reductions in summer visitors, our population grew so quickly during and then again after the spill that it has impacted our schools and housing costs have increased dramatically.

Data exists from studies conducted during the spill and on through 1992 which documents the continuing personal impact of adults as well as children as a result of the spill. The studies clearly show that Valdezian's and other PWS community residents still suffer from post traumatic stress in the forms of depression, marital problems, alcohol and drug abuse, domestic violence and from the frustration of knowing that the negative perceptions are not accurate or founded.

Prior to the spill the Terminal was a major attraction. Valdez has a new and different need for an attraction. One that can initially focus on accurate information on the impact of the spill and restoration efforts and then focus on providing education on the myriad of natural resources present in Prince William Sound. This will benefit Valdez, Prince William Sound, the State of Alaska, many other Americans as well as other countries.

WHAT

This project is to build a center for Prince William Sound to provide the public with accurate information on the impact of the spill, restoration efforts, existing conditions in PWS and ongoing education on the environment and natural resources and recreational opportunities in PWS.

The location of the center would be Valdez. As the only community on PWS that is accessible by road it provides the greatest amount of access to the most people.

A center located in Valdez would be enhanced by existing facilities such as Prince William Sound Community College and the Valdez Civic Center, which has an auditorium. This combination would provide an opportunity for hosting conferences, symposiums, seminars and other events to provide the latest information on the effects of the spill, and restoration efforts and ongoing education on the environment and natural resources of the Sound.

Restoration should take place where the damage occurred.

GOAL

Establish a center to:

Inform and educate the public on the effects and impacts of the Exxon Valdez oil spill, current research and restoration activities.

Provide the public with an accurate and balanced view of existing conditions in PWS.

Provide education and understanding to the public of the PWS and Gulf of Alaska environment to enhance their enjoyment and awareness of this area.

Enhance eco-tourism recreation opportunities and experiences through interpretation of the natural resources and environment.

OBJECTIVES

Build a center to provide initial education to the public on the effects of the spill, restoration efforts, existing conditions in PWS and ongoing education of the environment and natural resources in PWS including marine and land mammals, sea and upland birds, fishes, flora and fauna, intertidal life, cultural resources, history and recreational opportunities.

The center will provide education to the public through changing displays, video's, handout materials and presentations. The educational coverage would be provided to other Alaskan schools in partnership with the PWS Community College by distance delivery via satellite uplink.

To maximize it's utilization the center would also house the Valdez Convention & Visitors Bureau, the Valdez Chamber of Commerce, the PWS Economic Development Council and other appropriate partners involved in the center.

WHY

Because the negative impacts of the Exxon Valdez oil spill has effected many people and communities in Prince William Sound (PWS) a well established center is needed to provide the public with accurate information on the impact of the spill, restoration efforts that have been completed and are underway, existing conditions in PWS, ongoing education of the environment and natural resources of PWS and recreational opportunities.

HOW

Build a center to provide education to the public through partnership with Prince William Sound Community College (A Division of the University of Alaska System), City of Valdez, State of Alaska, City of Cordova, Chugach Alaska Corporation, Tatitlek Corporation, Chenaga Corporation, Eyak Corporation, Valdez Fisheries Development Association, PWS Aquaculture Association, Alaska Department of Natural Resources, U. S. Forest Service, National Oceanographic and Atmospheric Administration, U. S. Fish and Wildlife Service, Alaska Department of Fish & Game and National Marine Fisheries Service.

WHEN

Partnership establishment, curriculum development, design and engineering in 1994.

Construction, staffing and startup in 1995.

BUDGET

Current budget estimate is 1.5 to 2.0 million.

15.2.4 141V

STATE OF ALASKA

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

WALTER J. HICKEL, GOVERNOR

PLEASE REPLY TO:

■ *1031 WEST 4TH AVENUE, SUITE 200*
ANCHORAGE, ALASKA 99501-1994
PHONE: (907) 269-5100
FAX: (907) 276-3697

❒ *KEY BANK BUILDING*
100 CUSHMAN ST., SUITE 400
FAIRBANKS, ALASKA 99701-4679
PHONE: (907) 451-2811
FAX: (907) 451-2846

❒ *P.O. BOX 110300 - STATE CAPITOL*
JUNEAU, ALASKA 99811-0300
PHONE: (907) 465-3600
FAX: (907) 463-5295

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April 30, 1993

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

Ric Vrsalovic
P.O. Box 709
Whittier, Alaska 99693

Dear Mr. Vrsalovic:

Governor Hickel has requested that I reply to your letter of April 4, 1993. You are correct that the spotted shrimp fishery was closed in 1989, but then reopened for a short period in 1990. It was also reopened for a short period in 1991.

Alaska Department of Fish and Game biologists conducted studies of spotted shrimp as part of the EXXON VALDEZ oil spill natural resource damage assessment. Although I have not seen the results of those studies, I have been advised that the scientists were unable to determine whether the oil spill caused a population level injury to the spotted shrimp. The current problems with spotted shrimp appear to be primarily related to overfishing. A report of these findings is currently being circulated among scientific peer reviewers and should be finalized and released to the public in approximately two months.

When the report is finalized a copy will be placed in the Oil Spill Public Information Center Library at 625 G Street, Anchorage, Alaska, telepone number (907) 278-8008. The reports are also placed at 19 public libraries including Loussac in Anchorage, Valdez and Cordova. Although they are not placed in the Whittier library they are available in Whittier through the inter-library loan service. Finally, copies can be purchased at Clays Quality Printing or Time Frame Printing in Anchorage.

Staff for the Trustee Council reviews all study results as they become available and based upon those results makes recommendations to the Trustee Council for restoration projects. The Trustee Council has so far declined to fund a spotted shrimp restoration project. Nevertheless, the Trustee Council solicits and carefully considers public input concerning restoration

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projects. I have taken the liberty of forwarding your letter to Dave Gibbons, interim administrative director for the Trustee Council so that your proposal may be considered.

Sincerely,

CHARLES E. COLE
ATTORNEY GENERAL

By:
Alex Swiderski
Assistant Attorney General

AMS:akb

cc: Dave Gibbons

15.2.4 142w

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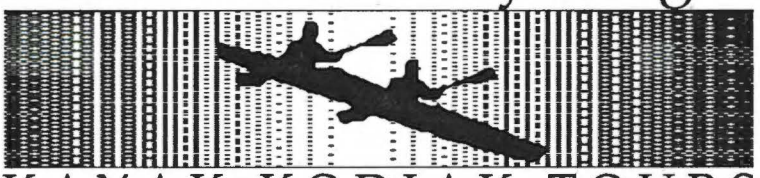

KAYAK KODIAK TOURS

POB 228 • Kodiak, Alaska 99615 • Ph: 907-486-2604

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MAY 20 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

May 14, 1993

Exxon Valdez Trustee Council
1994 Work Plan Group
645 G Street
Anchorage, AK 99615

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OCT 0 2 1995
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

Dear Exxon Valdez Trustee Council,

I urge you to pay particular attention to the suggestions and recommendations of the following organizations who are submitting their list of priorities to you regarding the 1994 Restoration Plan-Exxon Valdez Civil Settlement:

1) The Alaska Wilderness Recreation and Tourism Association;

2) The Kodiak State Parks Citizens Advisory Board (KSPCAB); and the

3) Kodiak Audubon Society.

Some of the priority projects proposed by the KSPCAB include:

- #202 Acquisition of recreational sites on the Kodiak road system
- #203 Land exchange, Shuyak for Kodiak land on road system
- #1 through #16 Archaeological projects (Speciman collection, Univ. of Alaska; Nuchek Heritage Center; various acquisition, inventory, restoration and historical priorities; and any site monitoring programs which I personally feel is very crucial. (also #119, 128, 129)

Mitigation opportunities must be prioritized using a scale that takes into account the immediate jeopardy of archaeological sites; critical land use changes and those which will have the longest, positive affect on the environment - all toward the benefit of future generations of humankind.

Thank you for considering these suggestions.

Tom Watson

Tom Watson, Owner-Manager
WAVETAMER KAYAKING

ACTIVE MEMBER:
Trade Association of Sea Kayaking • Kodiak Island CVB
• Alaska Visitors Association• Alaska Wilderness Recreation & Tourism Assoc. • The Ecotourism Society
Printed on Recycled Paper

Name: Tom Dolan
Phone:

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST'D COST/YR ($K)	EST'D DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Post 2001
128	Multiple Resources	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1									
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1									
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1									
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M									
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M									
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M									
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M									
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M									
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M									
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M									
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M									
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M									
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M									
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M									
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M									
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M									
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M									

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Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

	RESOURCE SERVICE	RESTORATION OPTION OR SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST $ COST/YR ($K)	EST DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2002	2001	2012
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M									
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									
220		Option Not Identified	Increased Access PWS	X			$100	M									
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1									
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									
229		Visitor Center	Environmental Education Center in PWS	X			$90	1									
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1									
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									

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93=Funded in 1993 M=Multi-year Project

Name:_____

Phone:_____

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR ($K)	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Not Fund
102	Marbled Murrelet	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M									
103	Multiple Resources	Habitat Protection	Habitat Modelling	X	X	X	$150	M									
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M									
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M									
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1									
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M									
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M									
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M									
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1									
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1									
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1									
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1									
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1									
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1									
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1									
121		Habitat Protection and Acquisition	Conservation Easement-Alalik Bay		X		$90	1									
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1									
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1									
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1									
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1									
127		Habitat Protection and Acquisition	Habitat Acquisition, Alognak			X	$112,500	1									

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Name: Tom Wolfe
Phone:

1994 POTENTIAL PROJECT TITLES

No.	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST ($K)	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	Archaeology	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M									
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M									
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									
17	Bald Eagle	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M									
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M									
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M									
20	Black Oystercatcher	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M									
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M									

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

Resources: Summary of Results of Injury Assessment Studies Done After the *Exxon Valdez* Oil Spill

Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	NOT entirely accurate
MARINE MAMMALS										
Harbor Seals (c)	YES (200)	YES	YES	POSSIBLY STABLE, BUT NOT RECOVERING (a)	UNKNOWN	YES	YES (d)	UNKNOWN	UNKNOWN	Many seals were directly oiled . There was a measurable difference in populations between oiled and unoiled areas in PWS in 1989 and 1990, Population was declining prior to the spill and no recovery evident in 1992. Oil residues found in seal bile were 5 to 6 times higher in oiled areas than unoiled areas in 1990.
Humpback Whales	NO	NO	NO	(e)	(e)	(e)	(e)	(e)	(e)	Other than fewer animals being observed in Knight Island Passage in summer 1989, which did not persist in 1990, the oil spill did not have a measurable impact on the north Pacific population of humpback whales.
Killer Whales	YES (13)	YES	UNKNOWN	RECOVERING	UNKNOWN	YES	UNKNOWN	UNKNOWN	UNKNOWN	13 Adult whales of the 36 in AB pod are missing and presumed dead. The AB pod has grown by 2 whales since 1990. Circumstantial evidence links whale disappearance to oiling.
Sea Lions (c)	UNKNOWN	UNKNOWN	NO	CONTINUING DECLINE	(e)	(e)	(e)	(e)	(e)	Several sea lions were observed with oiled pe and oil residues were found in some tissues. .. was not possible to determine population effects or cause of death of carcasses recovered. Sea lion populations were declining prior to the oil spill.

(a) There may have been an unequal distribution of injury within each region;
(b) Adjusted for carcasses not found, not reported, scavenged, or otherwise lost;
(c) Population may have been declining prior to the spill;
(d) Based on recovery of dead animals from this region of the spill zone;
(e) If no injury was detected or known, no assessment of recovery could be made;
(f) Total body count, not adjusted for carcasses not found.

Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	
Sea Otters	YES (3,500 TO 5,000)	YES	YES	STABLE, BUT NOT RECOVERING	YES, POSSIBLY	YES	YES	YES (d)	YES (d)	Post-spill surveys showed measurable difference in populations and survival between oiled and unoiled areas in 1989, 1990 and 1991. Survey data have not established a significant recovery. Prime-age animals were still found on beaches in 1989, 1990 and 1991. Carcasses of sea otters feed in the lower intertidal and subtidal areas and may still be exposed to hydrocarbons in the environment.
TERRESTRIAL MAMMALS										
Black Bear	NO	UNKNOWN	UNKNOWN	(e)	(e)	(e)	(e)	(e)	(e)	No field studies were done.
Brown Bear	NO	NO	NO	(e)	(e)	(e)	(e)	(e)	(e)	Hydrocarbon exposure was documented on Alaska Peninsula in 1989 including high hydrocarbon levels in the bile of one dead cub. Brown bear feed in the intertidal zone and may still be exposed to hydrocarbons in the environment.
River Otters	YES (NUMBER UNKNOWN)	UNKNOWN	YES	UNKNOWN	YES	YES	UNKNOWN	UNKNOWN	UNKNOWN	Exposure to hydrocarbons and sub-lethal effects were determined, but no effects were established on population. Sub-lethal indicators of possible oil exposure remained in 1991. River otters feed in the intertidal and shallow subtidal areas and may be still be exposed to hydrocarbons in the environment.
Sitka Black-tailed Deer	NO	NO	NO	(e)	(e)	(e)	(e)	(e)	(e)	Elevated hydrocarbons were found in tissues in some deer in 1989.

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Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	
BIRDS										
Bald Eagles	YES (614-902)	YES	YES	RECOVERING	UNKNOWN	YES	YES	YES (d)	YES(d)	Productivity in PWS was disrupted in 1989, but returned to normal in 1990. Exposure to hydrocarbons and some sub-lethal effects were f... in 1989 and 1990, but no continuing effects were observed on populations.
Black-legged Kittiwakes	YES (NUMBER UNKNOWN)	NO	NO	NO CHANGE	NO	YES	YES (d)	YES (d)	YES (d)	Total reproductive success in oiled and unoiled areas of PWS has declined since 1989. Hydrocarbon contaminated tissues were detected in 1989. Hydrocarbon contaminated stomach contents were detected in 1989 and 1990. This species is known for great natural variation and reproductive failure may be unrelated to the oil spill.
Black Oyster-catchers	YES (129 ADULTS; UNKNOWN FOR CHICKS (f)	YES	YES	RECOVERING	YES	YES	YES (d)	YES (d)	YES (d)	Differences in egg size between oiled and unoiled areas were found in 1989. Exposure to hydrocarbons and some sublethal effects were determined. Populations declined more in oiled areas than unoiled areas in post-spill surveys in 1989, 1990 and 1991. Black oystercatchers feed in the intertidal areas and may be still be exposed to hydrocarbons in the environment.
Common Murres	YES (175,000 to 300,000)	YES	YES	DEGREE OF RECOVERY VARIES IN COLONY	YES	NO	YES	YES	YES	Measurable impacts on populations were recorded in 1989, 1990 and 1991. Breeding is still inhibi... in some colonies in the Gulf of Alaska.
Glaucous-winged gulls	YES (NUMBER UNKNOWN)	NOT DETECTED	NO	NO CHANGE	NO	YES (d)	YES (d)	YES (d)	YES (d)	While dead birds were recovered in 1989, there is no evidence of a population level impact when compared to historic (1972, 1973) population levels.

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Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	
Harlequin Ducks	YES (423)	YES	YES	STABLE OR CONTINUING DECLINE	YES	YES	YES (d)	YES (d)	YES (d)	Post-spill samples showed hydrocarbon contamination and poor body conditions. Surveys in 1990-1992 indicated population declines and near total reproductive failure. Harlequin ducks feed in the intertidal and shallow subtidal areas and may still be exposed to hydrocarbons in the environment.
Marbled Murrelets (c)	YES (8,000 TO 12,000)	YES	UNKNOWN	STABLE OR CONTINUING DECLINE	UNKNOWN	YES	YES (d)	YES (d)	YES (d)	Measurable population effects on were recorded in 1989, 1990 and 1991. Marbled murrelet populations were declining prior to the spill. Hydrocarbc contamination was found in livers of adult bir
Peale's Peregrine Falcons	UNKNOWN	UNKNOWN	NO	(e)	(e)	(e)	(e)	(e)	(e)	When compared to 1985 surveys a reduction in population and lower than expected productivity was measured in 1989 in the PWS. Cause of these changes are unknown.
Pigeon Guillemots (c)	YES (1,500 TO 3,000)	YES	NO	STABLE OR CONTINUING DECLINE	UNKNOWN	YES	YES (d)	YES (d)	YES (d)	Pigeon guillemot populations were declining prior to the spill. Hydrocarbon contamination was found in birds and, externally, on eggs.
Storm Petrels	YES (NUMBER UNKNOWN)	NO	AWAITING RESULTS	NO CHANGE	UNKNOWN	YES (d)	YES (d)	YES (d)	YES (d)	Few carcasses were recovered in 1989 although petrels ingested oil and transferred oil to their eggs. Reproduction was normal in 1989.
Other Seabirds	YES (375,000-435,000)	VARIES BY SPECIES	UNKNOWN	VARIES BY SPECIES	UNKNOWN	YES (d)	YES (d)	YES (d)	YES (d)	Seabird recovery has not been studied. Species collected dead in 1989 include common, yellow-billed, pacific, red-throated loon; red-necked and horned grebe; northern fulmar; sooty and short-tailed shearwater; double-crested, pelagic, and red-faced cormorant; herring and mew gull; arctic and Aleutian tern; Kittlitz's and ancient murrelet, Cassin's, least, parakeet, and rhinoceros auklet and horned and tufted puffin.

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Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	no contrasts historical- as to unknown data
Other Sea Ducks	YES (875) (b)	NO	UNKNOWN	UNKNOWN	UNKNOWN	YES	YES (d)	YES (d)	YES (d)	Species collected dead in 1989 include Stellar's, king and common eider; white-winged, surf and black scoter; oldsquaw; bufflehead; common and Barrow's goldeneye; and common and red-breasted merganser. Sea ducks tend to feed in the intertidal and shallow subtidal areas which were most heavily impacted by oil.
Other Shorebirds	YES (NUMBER UNKNOWN)	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	YES	YES (d)	YES (d)	YES (d)	Species collected dead in 1989 include golden plover; lesser yellowlegs; semipalmated, western, least and Baird's sandpiper; surfbird; short-billed dowitcher; common snipe; red and red-necked phalarope.
Other Birds	YES (NUMBER UNKNOWN)	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	YES (d)	YES (d)	YES (d)	YES (d)	Species collected dead in 1989 include emperor and Canada goose; brant; mallard; northern pintail; green-winged teal; greater and lesser scaup; ruddy duck; great blue heron; long-tailed jaeger; willow ptarmigan; great-horned owl; Stellar's jay; magpie; common raven; northwestern crow; robin; varied and hermit thrush; yellow warbler; pine grosbeak; savannah and golden-crowned sparrow; white-winged crossbill.
FISH										
Cutthroat Trout	YES, SEE COMMENTS	POSSIBLY	YES	STABLE, BUT NOT RECOVERING	UNKNOWN	YES	UNKNOWN	UNKNOWN	UNKNOWN	Differences in survival and growth between anadromous adult populations in the oiled and unoiled areas persisted in 1991 despite the decrease in exposure indicators. This could be due to continuing injury to the food base.
Dolly Varden	YES, SEE COMMENTS	POSSIBLY	YES	STABLE, BUT NOT RECOVERING	UNKNOWN	YES	UNKNOWN	UNKNOWN	UNKNOWN	Differences in survival between anadromous adult populations in the oiled and unoiled areas persisted in 1991 despite the decrease in exposure indicators. This could be due to continuing injury to the food base.

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Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	
Pacific Herring	YES, TO EGGS AND LARVAE	UNKNOWN	YES	UNKNOWN	NO	YES	UNKNOWN	UNKNOWN	UNKNOWN	Measurable difference in egg counts between oiled and unoiled areas were found in 1989 and 1990. Lethal and sublethal effects on eggs and larvae were evident in 1989 and to a lesser extent in 1990; in 1991 there were no differences between oiled and unoiled areas. It is possible that the 1989 year class was injured and could result in reduced recruitment to the fishery.
Pink Salmon (Wild) (c)	YES, TO EGGS	POSSIBLY	YES	SEE COMMENTS	YES	YES	UNKNOWN	UNKNOWN	UNKNOWN	There was initial egg mortalituy in 1989. Egg mortality continued to be high in 1991, possib due to genetic damage to spawners. Abnormal f were observed in 1989. Reduced growth of juveniles was found in the marine environment, which can be correlated with reduced survival.
Rockfish	YES (20) (f)	UNKNOWN	YES	UNKNOWN	UNKNOWN	YES	YES	UNKNOWN	UNKNOWN	Few dead fish were found in 1989 in condition to be analyzed. Exposure to hydrocarbons with some sub-lethal effects were determined in those fish, but no effects established on the population. Closures to salmon fisheries increased fishing pressures on rockfish which may be impacting population.
Sockeye Salmon	UNKNOWN	YES	YES	SEE COMMENTS	YES	UNKNOWN	YES	YES	NO	Smolt survival continues to be poor in the Red Lake and Kenai River systems due to overescapements in Red Lake in 1989, and in the Kenai River in 1987, 1988, 1989. As a result, future adult returns are expected to be low in 1994 and successive years. Trophic structures of Kenai and Skilak Lakes have been altered by overescapement.
SHELLFISH										
Clam	YES (NUMBER UNKNOWN)	UNKNOWN	POSSIBLY, FINAL ANALYSES PENDING	UNKNOWN	UNKNOWN	YES	YES	YES	YES	Native littleneck and butter clams were impacte both oiling and clean-up, particularly high pressure, hot water washing. Littleneck clams transplanted to oiled areas in 1990 grew significantly less than those transplanted to unoiled sites. Reduced growth recorded at oiled sites in 1989 but not 1991.

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Resource	Description of Injury			Status of Recovery in December, 1992		Geographic Extent of Injury (a)				Comments/Discussion
	Oil Spill Mortality (total mortality estimate) (b)	Decline in Population after the spill	Evidence of Sublethal or Chronic Effects	Current Population Status	Evidence of Continuing Sublethal or Chronic Effects	PWS	Kenai	Kodiak	Alaska Penin.	What was Before ??
Crab (Dungeness)	UNKNOWN	UNKNOWN	UNKNOWN	(e)	(e)	(e)	(e)	(e)	(e)	Crabs collected from oil areas were not found to have accumulated petroleum hydrocarbons.
Oyster	UNKNOWN	UNKNOWN	UNKNOWN	(e)	(e)	(e)	(e)	(e)	(e)	Although studies were initiated in 1989, they we not completed because they were determined to be of limited value.
Sea Urchin	UNKNOWN	UNKNOWN	UNKNOWN	(e)	(e)	(e)	(e)	(e)	(e)	Studies limited to laboratory toxicity studies.
Shrimp	UNKNOWN	UNKNOWN	NO	(e)	(e)	(e)	(e)	(e)	(e)	No conclusive evidence presented for injury linked to oil spill.
INTERTIDAL/SUBTIDAL COMMUNITIES										
Intertidal Organisms/ Communities	YES	YES	YES	VARIABLE BY SPECIES, SEE COMMENTS	YES	YES	YES	YES	YES	Measurable impacts on populations of plants and animals were determined. The lower intertidal and, to some extent, the mid intertidal is recovering. Some species (Fucus) in the upper intertidal zone have not recovered, and oil may persist in and mussel beds.
Subtidal Communities	YES	YES	YES	VARIABLE BY SPECIES, SEE COMMENTS	YES	YES	UNKNOWN	UNKNOWN	UNKNOWN	Measurable impacts on population of plants and animals were determined in 1989. Eel grass and some species of algae appear to be recovering. Amphipods in eel grass beds recovered to pre-sp densities in 1991. Leather stars and helmet cr show little sign of recovery through 1991.

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Service	Description of Injury	Status of Recovery in December, 1992	Geographic Extent of Injury (a)				Comments/Discussion
			PWS	Kenai	Kodiak	Alaska Penin.	
Passive Use	In 1991, over 90% of those surveyed (nation-wide) said they were aware of the *Exxon Valdez* oil spill. People report that values have been lost; their feelings about the spill area have changed. There is a wide-spread feeling that something has been lost.	Recovery status is unknown.	YES	YES	YES	YES	Over 50% of those surveyed believed that the spill was the largest environmental accident caused by humans anywhere in the world. The median household willingness to pay for future prevention was $31. Multiplying this by the number of U.S. household results in a damage estimate of $2.8 billion.
Recreation (e.g., hunting, fishing, camping, kayaking, sailboating, motorboating, environmental education)	The nature and extent of injury varied by user group and by area. About a quarter of key informants interviewed reported no change in their recreation experience, but others reported avoidance of the spill area, reduced wildlife sightings, residual oil, and more people. Overall, recreation use declined significantly in 1989. Between 1989 and 1990 a decline in sport fishing (number of anglers, fishing trips and fishing days) were recorded for PWS, Cook Inlet and the Kenai Peninsula. In 1992 an emergency order restricting cutthroat trout fishing was issued for western PWS due to low adult returns. Sport hunting of harlequin duck was affected by restrictions imposed in 1991 in response to damage assessment studies.	Declines in recreation activities reported in 1989 appear to be recovering for some user groups, but the degree of recovery is unknown. EVOS related sockeye over-escapement in the Kenai River and Red Lake system is anticipated to result in low adult returns in 1994 and 1995. These over-escapements may result in sport fishing closures or harvest restrictions during these and perhaps in subsequent years. The 1992 sport fishing closure for cutthroat trout is expected to continue at least through 1993. Harvest restrictions are expected to continue for harlequin duck through 1993.	YES	YES	YES	YES	Survey respondents also reported changes in their perception of recreation opportunity in terms of increased vulnerability to future oil spills, erosion o wilderness, a sense of permanent change, concern about long-term ecological effects, and, in some, a sense of optimism.

(a) There may have been an unequal distribution of injury within each region, see map for location of regions.

Service	Description of Injury	Status of Recovery in December, 1992	Geographic Extent of Injury (a)				Comments/Discussion
			PWS	Kenai	Kodiak	Alaska Penin.	
Commercial Fishing	During 1989, emergency commercial fishery closures were ordered in PWS, Cook Inlet, Kodiak and the Alaska Peninsula. This affected salmon, herring, crab, shrimp, rockfish and sablefish. The 1989 closures resulted in sockeye over-escapement in the Kenai River and in the Red Lake system (Kodiak Island). In 1990 a portion of PWS was closed to shrimp fishing.	Currently there are no area-wide oil spill-related commercial closures in effect. Management actions to try to compensate for the spill are still in effect. EVOS related sockeye over-escapement in the Kenai River and Red Lake system is anticipated to result in low adult returns in 1994 and 1995. These over-escapements may result in closure or harvest restrictions during these and perhaps in subsequent years.	YES	YES	YES	YES	Injuries and recovery status of rockfish, pink salmon, shellfish and herring are uncertain. Therefore, future impacts on these fisheries is unknown.
Commercial Tourism	Approximately 43% of the tourism businesses surveyed felt their businesses had been significantly affected by the oil spill in summer 1989. The net loss in visitor spending in the oil spill area in 1989 was $19 million.	By 1990, 12% of the tourism businesses surveyed felt their businesses had been significantly affected by the oil spill.	YES	YES	YES	YES	mainly false - Record greater Tour numbers than formerly

(a) There may have been an unequal distribution of injury within each region.

Summary of Results of Injury Assessment Studies Done After the *Exxon Valdez* Oil Spill

Service	Description of Injury	Status of Recovery in December, 1992	Geographic Extent of Injury (a)				Comments/Discussion
			PWS	Kenai	Kodiak	Alaska Penin.	
Subsistence	Subsistence harvests of fish and wildlife in 10 of 15 villages surveyed declined from 4 - 78% in 1989 when compared to pre-spill levels. At least 4 of the 10 villages showed continued lower than average levels of use in the period 1990-1991; this decline is particularly noticeable in the Prince William Sound villages of Chenega and Tatitlek. In 1989-1991, chemical analysis indicated that most resources tested, including fish, marine mammals, deer, and ducks, were safe to eat. In 1989-1991, health advisories were issued indicating that shellfish from oiled beaches should not be eaten.	Many subsistence users believe that continued contamination to subsistence food sources is dangerous to their health. In addition, village residents believe that subsistence species continue to decline or have not recovered from the oil spill.	YES	YES	YES	NO	For detailed information on village subsistence use see table _, page__.

inaccurate as villagers often prefer live in major cities

(a) There may have been an unequal distribution of injury within each region.

Summary of Results of Injury Assessment Studies Done After the *Exxon Valdez* Oil Spill

Other Natural Resources and Archaeology: Summary of Results of Injury Assessment Studies Done After the *Exxon Valdez* Oil Spill (b)

Resource	Description of Injury	Status of Recovery in December, 1992	Geographic Extent of Injury (a)				Comments/Discussion
			PWS	Kenai	Kodiak	Alaska Penin.	
Air	Air quality standards for aromatic hydrocarbons were exceeded in portions of PWS. Health and safety standards for permissible exposure levels were exceeded up to 400 times.	Recovered	YES	NO	NO	NO	Impacts diminished rapidly as oil weathered and lighter factions evaporated.
Sediments	Oil coated beaches and became buried in beach sediments. Oil laden sediments were transported off beaches and deposited on subtidal marine sediments.	Patches of oil residue remain intertidally on rocks and beaches and buried beneath the surface at other beach locations. Oil remains in some subtidal marine sediments and has spread to depths greater than 20 meters.	YES	YES	YES	YES	Unweathered buried oil will persist for many years in protected low-energy sites.
Water	State of Alaska water quality standards may have been exceeded in portions of PWS. Federal and State oil discharge standards of no visible sheen were exceeded.	Recovered	YES	YES	YES	YES	Impacts diminished as oil weathered and lighter fractions evaporated.
Archaeological sites/artifacts	Currently, 24 sites are known to have been adversely affected by oiling, clean-up activities, or looting and vandalism linked to the oil spill. 113 sites are estimated to have been similarly affected. Injuries attributed to looting and vandalism (linked to the oil spill) are still occurring.	Archaeological sites and artifacts cannot recover; they are finite non-renewable resources.	YES	YES	YES	YES	Generally part of ordinary Interior PRE-view
Designated Wilderness Areas	Many miles of Federal and State Wilderness and Wilderness Study Area coastlines were affected by oil. Some oil remains buried in the sediments of these areas.	Oil has degraded in many areas but remains in others. Until the remaining oil degrades, injury to Wilderness areas will continue.	YES	YES	YES	YES	

(a) There may have been an unequal distribution of injury within each region.
(b) This page has not yet been reviewed by the Chief Scientist.

(a) There may have been an unequal distribution of injury within each region.

Name:____________________
Phone:____________________

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	Archaeology	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M									
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M									
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									
17	Bald Eagle	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M									
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M									
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M									
20	Black Oystercatcher	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M									
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M									

Not essential — No reference to oil or other damages prevention/correction

=Prince William Sound, KEN=Kenai Peninsula and Cook Inlet,
Kodiak Archipelago and Alaska Peninsula, OUT=Outside Oil Spill Area

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Name:_____

Phone:_____

	RESOURCE or SERVICE	RESTORATION OPTION & SUBOPTION	POTENTIAL PROJECTS	REGION PWS	KEN	KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	DO NOT FUND
22	**Black Oystercatcher**	Restoration Monitoring															
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M									
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M									
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M									
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M									
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M									
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M									
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M									
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M									
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M									
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
42	Common Murre	Restoration Monitoring						M									
43	Cutthroat/Dolly	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M									
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M									
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M									
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									
47		Restoration Monitoring						M									
48	General	Administration	Oil Spill Restoration Support Service and Facilities	X	X	X	$600	1									
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M									
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1									
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M									
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M									
54		Public Information	PWS Brochures	X			$65	M									
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									
56		Public Information	PWS Large Format Photographic Book	X			$100	M									
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									
58		Public Information	PWS Video Programs	X			$100	M									
59		Public Information	Science of the Sound- Education Program	X			$53	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION & SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M									
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M									
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M									
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M									
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds															
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M									
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M									
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M									
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M									
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M									
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M									
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M									
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M									
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M									
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M									
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M									
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M									
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M									

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
82	Intertidal	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M									
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M									
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M									
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M									
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M									
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M									
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M									
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									
92	Killer Whale	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M									
93		Monitoring	Recovery Monitoring	X			$125	M									
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M									
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M									
96	Marbled Murrelet	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M									
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M									
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M									
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M									
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M									

This belongs in Fish-Wildlife Program

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	RESOURCE or SERVICE	RESTORATION OPTION / SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M									
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M									
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M									
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M									
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1									
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M									
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M									
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M									
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1									
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1									
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1									
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1									
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1									
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1									
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1									
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1									
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1									
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1									
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1									
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1									
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1									

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
128	Multiple Resources	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1									
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1									
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1									
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M									
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M									
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M									
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M									
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M									
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M									
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M									
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M									
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M									
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M									
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M									
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M									
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M									
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M									

These support personnel favored not control OR prevention

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	3c Not Fund
158	**Multiple Resources**	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M									
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M									
160		Reduce Disturbance by Field Presence															
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M									
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M									
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M									
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M									
165	**Pacific Herring**	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M									
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M									
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M									
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M									
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M									
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M									
171		Restoration Monitoring															
172	**Pigeon Guillemot**	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M									
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M									
174		Restoration Monitoring															
175		Temporary Predator Control															

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
176	Pink Salmon	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M									
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M									
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M									
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M									
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M									
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M									
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M									
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M									
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M									
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M									
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M									
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M									
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M									
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M									
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M									
197	Recreation	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M									
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1									
199		Establish Marine Environmental Institute	Seward Sea Life Center	X	X	X	$40,000	1									
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M									
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M									

NOT proper part of Prevention - Safety Program

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	0C Nat Fund
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M									
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									
220		Option Not Identified	Increased Access PWS	X			$100	M									
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1									
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									
229		Visitor Center	Environmental Education Center in PWS	X			$90	1									
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1									
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	DO NOT FUND
232	**Recreation**	Visitor Center	Information Center	X	X	X	$600	1									
233		Visitor Center	Interpretation of PWS	X			$10	M									
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									
236		Visitor Center	Valdez Visitor Center	X			$850	1									
237	**River Otter**	Monitoring	River Otter Recovery Monitoring	X			$180	M									
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M									
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1									
241	**Rockfish**	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M									
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M									
243		Monitoring															
244	**Sea Otter**	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M									
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M									
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M									
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M									
249		Restoration Monitoring															

NOT Germane to Industrial Protection funding

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M									
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M									
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M									
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M									
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M									
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M									
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M									
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									
261	**Sport Fishing**	Recovery Monitoring															
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									
263		Restoration Monitoring															
264	**Subsistence**	Access to Traditional Foods															
265		Bivalve Shellfish Hatchery															
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M									
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1									

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268	Subsistence	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									
269		Option Not Identified	Seward Shellfish Hatchery	X	X	X	$1,300	1									
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M									
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M									
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1									
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M									
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M									
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M									
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M									
280	Subtidal	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M									
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M									
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M									
286		Monitoring	Subtidal Recovery Monitoring	X	X	X	$400	M									
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M									
288	Technical Services	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M									
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M									

Do not belong in Restoration Program funding

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290	Technical Services	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M									
291		Administration	Toxicological Profile of PWS	X			$150	M									
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M									
293		Public Information	Database Integration	X	X	X	$148	M									
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M									
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M									
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M									
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M									

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RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	2002 Not Fund
		The Referred "funds" Come out of National economy — The settlements are for future Control — preventative works - Not This on-going Bureaucracy "work less works"														

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1994 POTENTIAL PROJECT TITLES

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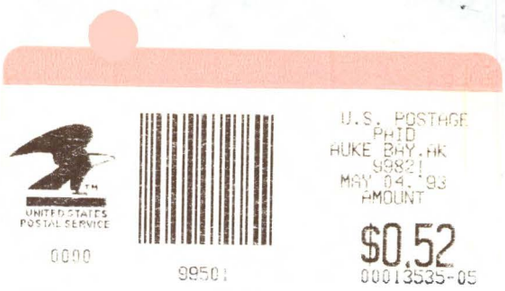

EXXON VALDEZ TRUSTEE COUNCIL
1994 Work Plan Work Group
645 "G" Street
Anchorage, Alaska 99501

RECEIVED
OCT 0 2 1995
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

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RECEIVED
MAY 0 6 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

Name: Alex Wertheimer
Phone: (907) 789-0789

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	**Archaeology**	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									X
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									X
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M									X
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									X
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M	X								
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									X
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									X
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									X
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									X
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									X
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									X
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									X
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									X
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									X
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									X
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									X
17	**Bald Eagle**	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M									X
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M	X								
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M	X								
20	**Black Oystercatcher**	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M	X								
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M	X								

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22	**Black Oystercatcher**	Restoration Monitoring							X								
																	X
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M	X								
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									X
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									X
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									X
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									X
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M	X								
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									X
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M	X								
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M	X								
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									X
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									X
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									X
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									X
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M	X								
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M	X								
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M	X								
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M	X								
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M	X								
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M	X								

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42	**Common Murre**	Restoration Monitoring						M									
43	**Cutthroat/Dolly**	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M									X
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M	X								
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M									X
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									X
47		Restoration Monitoring						M									
48	**General**	Administration	Oil Spill Restoration Support Service and Facilities	X	X	X	$600	1	X								
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M									X
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1	X								
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									X
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M	X								
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M	X								
54		Public Information	PWS Brochures	X			$65	M	X								
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									X
56		Public Information	PWS Large Format Photographic Book	X			$100	M									X
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									X
58		Public Information	PWS Video Programs	X			$100	M									X
59		Public Information	Science of the Sound- Education Program	X			$53	M	X								

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M	X								
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M	X								
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M	X								
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M									X
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds					$100		X								
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M									X
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M	X								
			Population Monitoring				$100		X								
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M	X								
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M	X								
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									X
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M	X								
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									X
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									X
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M									X
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M	X								
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M	X								
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M	X								
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M	X								
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M									X
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M	X								
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M	X								

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82	**Intertidal**	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M									X
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M	X								
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M									X
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M	X								
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M	X								
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									X
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M	X								
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									X
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M	X								
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									X
92	**Killer Whale**	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M	X								
93		Monitoring	Recovery Monitoring	X			$125	M	X								
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M									X
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M	X								
96	**Marbled Murrelet**	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M									X
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M	X								
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M									X
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M	X								
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M	X								

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102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M	X								
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M									X
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M	X								X
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									X
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M									X
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1	X								
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M									X
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M									X
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M									X
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1	X								
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X	?	1									
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X	?	1									
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									X
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1	X								
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X	?	1									
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									X
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									X
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1	X								
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1	X								
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1	X								
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1	X								
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									X
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1	X								
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1									X
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1									?
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1									X

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128	**Multiple Resources**	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1									X
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1									X
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1	X								
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M	X								
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M	X								
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M	X								
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M	X								
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M	X								
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									X
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									X
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									X
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									X
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M	X								
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M	X								
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									X
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M									X
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M	X								
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									X
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M	X								
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M									X
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									X
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									X
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M	X								
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									X
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M	X								
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M	X								
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M	X								
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M									X
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M	X								

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158	**Multiple Resources**	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M	X								
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M	X								
160		Reduce Disturbance by Field Presence															
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M									X
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M	X								
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M									X
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M									X
165	**Pacific Herring**	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M	X								
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M	X								
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M									X
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M	X								
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M	X								
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M									X
171		Restoration Monitoring															
172	**Pigeon Guillemot**	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M	X								
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M	X								
174		Restoration Monitoring															
175		Temporary Predator Control															

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176	**Pink Salmon**	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M	X								
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									X
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									X
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									X
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									X
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									X
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									X
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M									X
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M	X								
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M	X								
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M									X
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M	X								
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M									X
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M									X
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M	X								
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M	X								
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M	X								
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M	X								
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M									X
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M	X								
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M									X
197	**Recreation**	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M									X
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1									X
199		Establish Marine Environmental Institute	Seward Sea Life Center	X	X	X	$40,000	1									X
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M									X
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M									X

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202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									X
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									X
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M									X
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									X
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M	X								X
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									X
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									X
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									X
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									X
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									X
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									X
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									X
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									X
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									X
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									X
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									X
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									X
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									X
220		Option Not Identified	Increased Access PWS	X			$100	M									X
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									X
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									X
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1									X
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									X
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									X
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									X
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									X
229		Visitor Center	Environmental Education Center in PWS	X			$90	1									X
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1									X
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									X

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232	**Recreation**	Visitor Center	Information Center	X	X	X	$600	1									X
233		Visitor Center	Interpretation of PWS	X			$10	M									X
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									X
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									X
236		Visitor Center	Valdez Visitor Center	X			$850	1									X
237	**River Otter**	Monitoring	River Otter Recovery Monitoring	X			$180	M	X								
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M	X								
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1	X								
241	**Rockfish**	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M	X								
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M	X								
243		Monitoring															
244	**Sea Otter**	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M	X								
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M	X								
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M	X								
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M	X								
249		Restoration Monitoring															

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									X
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M									X
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M									X
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M									X
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M									X
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M									X
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									X
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M	X								
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M									X
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									X
261	**Sport Fishing**	Recovery Monitoring															?
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									X
263		Restoration Monitoring															
264	**Subsistence**	Access to Traditional Foods															
265		Bivalve Shellfish Hatchery															
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M	X								
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1	X								

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268	Subsistence	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									X
269		Option Not Identified	Seward Shellfish Hatchery	X	X	X	$1,300	1									X
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M	X								
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M	X								
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									X
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1									X
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									X
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M	X								
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M	X								
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M	X								
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M	X								
280	Subtidal	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									X
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									X
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									X
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M									X
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M	X								
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M	X								
286		Monitoring	Subtidal Recovery Monitoring	X	X	X	$400	M	X								
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M									X
288	Technical Services	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M	X								
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M	X								

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290	**Technical Services**	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M	X								
291		Administration	Toxicological Profile of PWS	X			$150	M	X								
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M	X								
293		Public Information	Database Integration	X	X	X	$148	M	X								
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M									
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M	X								
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M	X								
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M									X

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15.2.4 145W

A. Wieland
1421 N St
Anchorage, AK 99501

EXXON VALDEZ TRUSTEE COUNCIL
1994 Work Plan Work Group
645 "G" Street
Anchorage, Alaska 99501

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MAY 20 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

RECEIVED
OCT 02 1995
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

Name: Anne Wieland
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1994 POTENTIAL PROJECT TITLES

— and → and * used to indicate time-duration - I don't know over what period of time most of my choices should be funded.

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	**Archaeology**	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M									
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M	✓								
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M	✓								
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									
17	**Bald Eagle**	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M	✓								
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M	✓								
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M	✓								
20	**Black Oystercatcher**	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M									
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M									

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22	**Black Oystercatcher**	Restoration Monitoring															
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M									
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M									
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M									
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M									
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M									
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M									
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M									
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M									
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M									
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M									

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42	**Common Murre**	Restoration Monitoring						M									
43	**Cutthroat/Dolly**	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M									
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M									
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M									
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									
47		Restoration Monitoring						M									
48	**General**	Administration	Oil Spill Restoration Support Service and Facilities	X	X	X	$600	1									
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M									
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1									
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M									
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M									
54		Public Information	PWS Brochures	X			$65	M									
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									
56		Public Information	PWS Large Format Photographic Book	X			$100	M									
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									
58		Public Information	PWS Video Programs	X			$100	M									
59		Public Information	Science of the Sound- Education Program	X			$53	M									

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60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M									
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M									
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M									
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M									
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds															
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M									
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M									
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M									
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M									
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M									
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M									
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M									
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M									
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M									
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M									
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M									
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M									
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M									

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82	**Intertidal**	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M									
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M									
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M									
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M									
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M									
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M									
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M									
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									
92	**Killer Whale**	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M									
93		Monitoring	Recovery Monitoring	X			$125	M									
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M									
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M									
96	**Marbled Murrelet**	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M									
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M									
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M									
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M									
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M									

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102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M									
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M									
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M									
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M									
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M									
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1									
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M									
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M									
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M									
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1									
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1									
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1									
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1									
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1									
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1									
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1									
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1									
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1									
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1									
125		Habitat Protection and Acquisition	Conservation Easement-Rocky Bay		X		$740	1									
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1									
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1									

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128	**Multiple Resources**	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island ✓			X	$20,000	1								→	
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island ✓			X	$4,000	1								→	
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition ✓			X	$1,000	1								→	
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M									
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M									
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M									
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M									
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M									
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M									
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M									
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M	X	X							
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M									
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M									
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M									
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M								→	
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M									
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M									

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158	**Multiple Resources**	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M									
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M									
160		Reduce Disturbance by Field Presence															
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M									
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M									
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M									
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M									
165	**Pacific Herring**	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M									
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M	—	—	—	—	—	—	—	→	
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M									
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M									
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M									
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M									
171		Restoration Monitoring															
172	**Pigeon Guillemot**	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M									
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M	—	—	—	—	—	—	—	→	
174		Restoration Monitoring															
175		Temporary Predator Control															

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176	**Pink Salmon**	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M									
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M									
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M									
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M									
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M									
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M									
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M									
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M									
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M									
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M									
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M									
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M									
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M									
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M									
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M									
197	**Recreation**	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M									
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1									
199		Establish Marine Environmental Institute	Seward Sea Life Center NO	X	X	X	$40,000	1									X
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M									
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M	→	→	→	→	→	→	→	→	

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don't use Exxon $ any more - seek private funds to complete this worthwhile project

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M									
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									
220		Option Not Identified	Increased Access PWS	X			$100	M									X
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1									
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									
229		Visitor Center	Environmental Education Center in PWS	X			$90	1									
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1									
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									

no more EVOS $ for Rdts Whittier - seek other funding. too many PWS tourists will ruin the fishing

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Name:_____

Phone:_____

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
232	**Recreation**	Visitor Center	Information Center	X	X	X	$600	1									
233		Visitor Center	Interpretation of PWS	X			$10	M									
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									
236		Visitor Center	Valdez Visitor Center	X			$850	1									
237	**River Otter**	Monitoring	River Otter Recovery Monitoring	X			$180	M									
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M									
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1									
241	**Rockfish**	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M									
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M									
243		Monitoring															
244	**Sea Otter**	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M									
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M									
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M									
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M									
249		Restoration Monitoring															

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M									
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M									
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M									
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M	→	→	→	→	→	→	→		
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M	→	→	→	→	→	→	→		
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M	→	→	→	→	→	→	→		
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M	→	→	→	→	→	→	→		
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									
261	**Sport Fishing**	Recovery Monitoring															
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									X
263		Restoration Monitoring															
264	**Subsistence**	Access to Traditional Foods															
265		Bivalve Shellfish Hatchery															
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M	→	→	→	→	→	→	→		
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1									

no more EVOS $ for this project

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268	**Subsistence**	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									
269		Option Not Identified	Seward Shellfish Hatchery — in Seward or Auke Bay	X	X	X	$1,300	1	→	→	→	→	→	→	→		
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M									
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M									
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1	→	→	→	→					
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M									
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M									
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M									
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M									
280	**Subtidal**	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M									
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M									
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M									
286		Monitoring	Subtidal Recovery Monitoring —	X	X	X	$400	M	→	→	→	→	→	→	→		
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M									
288	**Technical Services**	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M									
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M									

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290	**Technical Services**	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M									
291		Administration	Toxicological Profile of PWS	X			$150	M									
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M									
293		Public Information	Database Integration	X	X	X	$148	M									
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M									
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M									
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M									
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M									

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RESOLUTION OF THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY

Meeting in Juneau, AK 4/19/93

EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

A RESOLUTION URGING THE EXXON VALDEZ OIL SPILL COUNCIL TO WORK WITH THE UNIVERSITY OF ALASKA ON A PLAN TO ENDOW UP TO 20 ACADEMIC CHAIRS IN BIOLOGY TO FULFILL THE LONG TERM GOALS OF THE SETTLEMENT.

WHEREAS, the biological resources of the northern Gulf of Alaska were terribly devastated by the Exxon Valdez oil spill, and

WHEREAS, baseline scientific data was completely inadequate to positively assess the damage and is completely inadequate to realistically restore the environment, and

WHEREAS, future shipwrecks and oil spills in the area are a realistic probability, and

WHEREAS, the accumulation of scientific knowledge and advancement of scientific technology make enormous advances each year and will continue to do so on into the centuries ahead, and

WHEREAS, endowed academic chairs will provide continuing top quality scientific investigation, top quality scientific publications, top quality training for the scientists that will be needed by the agencies and companies responsible for resource management and development, in perpetuity, and

WHEREAS, the Exxon Valdez Oil Spill Trustee Council is charged under the legal settlement with the Exxon Company with restoring rehabilitating, replacing, enhancing or acquiring equivalent resources and services in the oil spill region and presently lacks most of the scientific resources to accomplish these things, and

WHEREAS, with the inevitable scientific advancement in the decades or centuries ahead eventually enhancement of many of the biological resources will be possible, and

WHEREAS, concentrating a major center for advancement of biological science at the University of Alaska is in the best interests of all Alaskans injured by the Exxon Oil Spill, and

WHEREAS, the University of Alaska already has an appropriate Foundation for managing endowed chairs;

NOW THEREFORE BE IT RESOLVED BY THE MEMBERSHIP OF THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY:

1. To urge the Exxon Valdez Oil Spill Trustee Council to instruct their Restoration Team to contact and cooperate with the University of Alaska in developing a plan for establishing up to 20 endowed chairs in biology that will fulfill the intent of the settlement.

2. That such a plan be included in the Restoration Plan and EIS being prepared this year by the Restoration Team.

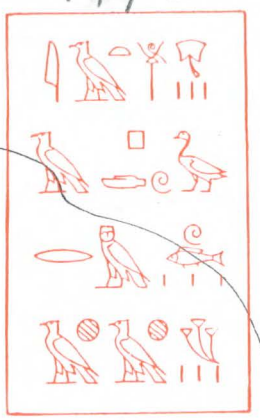
Adopted this 20th day of April 1993.

_____

Kim Titus, President

15.2.4 147 W

THE WILDLIFE SOCIETY
ALASKA CHAPTER



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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

P.O. Box 20604
Juneau, AK 99802

1 May 1993

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EXXON VALDEZ OIL SPIL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

Dr. David R. Gibbons
Exxon Valdez Oil Spill Trustee Council
645 G. Street
Anchorage, AK 99501

Dear Dr. Gibbons:

The Wildlife Society, founded in 1937, is a nonprofit scientific and education organization of professionals active in wildlife research, management, education and administration. The Society publishes two scientific journals and a monograph series. The Alaska Chapter of The Wildlife Society has about 330 members. We recently held our annual meeting in Juneau and adopted a resolution urging the Oil Spill Trustee Council to consider the endowment of chaired positions in the biological sciences with the University of Alaska system.

Our resolution does not specify the types of positions that might best be suited to meet the restoration goals. Myself and other members the Alaska Chapter would gladly provide more detailed suggestions to the Oil Spill Trustee Council about the types of expertise that could best provide the types of biological information and education that will be needed into the future. Endowed university chairs would provide heightened research and education within the state of Alaska that will benefit all Alaskans.

Sincerely,

Kimberly Titus

Kimberly Titus, Ph.D.
President

RESOLUTION OF THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY

A RESOLUTION URGING THE EXXON VALDEZ OIL SPILL COUNCIL TO WORK WITH THE UNIVERSITY OF ALASKA ON A PLAN TO ENDOW UP TO 20 ACADEMIC CHAIRS IN THE BIOLOGICAL SCIENCES TO FULFILL THE LONG-TERM GOALS OF THE SETTLEMENT.

WHEREAS, the biological resources of the northern Gulf of Alaska were severely impacted by the Exxon Valdez oil spill,

WHEREAS, baseline scientific data were inadequate to positively assess the damage and are inadequate to realistically restore the environment, and

WHEREAS, future shipwrecks and oil spills in the area are a realistic probability, and

WHEREAS, the accumulation of scientific knowledge and advancement of scientific technology make enormous advances each year and will continue to do so into the centuries ahead, and

WHEREAS, endowed academic chairs will provide continuing quality scientific investigation, scientific publications, and excellence in training that will be needed by the agencies and companies responsible for resource management and development in perpetuity, and

WHEREAS, the Exxon Valdez Oil Spill Trustee Council is charged with restoring, rehabilitating, replacing, enhancing or acquiring equivalent resources and services in the oil spill region and could benefit from better means to accomplish these goals, and

WHEREAS, with scientific advancements in the decades or centuries ahead eventual enhancement of many of the biological resources will be possible, and

WHEREAS, concentrating a major center for advancement of the biological sciences at the University of Alaska is in the best interests of all Alaskans injured by the Exxon Oil Spill, and

WHEREAS, the University of Alaska already has an appropriate Foundation for managing endowed chairs;

NOW IT THEREFORE BE RESOLVED BY THE MEMBERSHIP OF THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY:

1. To urge the Exxon Valdez Oil Spill Trustee Council to instruct their Restoration Team to contact and cooperate with the University of Alaska in developing a plan for establishing up to 20 endowed chairs in the biological sciences that will fulfill the intent of the settlement.

2. That such a plan be included in the Restoration Plan and Environmental Impact Statement being prepared this year by the Restoration Team.

Adopted this 20th day of April 1993.

Kimberly Titus, President

x
y
z

15.2.4 148y

Yukon Telephone Company, Inc.

P.O. BOX 873809 WASILLA, ALASKA 99687 TELEPHONE 907-373-6007

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

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EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

March 30,1992

Exxon Valdez Oilspill Trustee Council
645 G Street
Anchorage, Alaska 99501

Dear Council Members:

Yukon Telephone Co. Inc. (YTC) has been working on a communications package for Prince William Sound for the past three years. Presently YTC is waiting on the FCC to approve the radio frequencies that YTC applied for a year ago. Assuming the frequencies are approved by the summer of 1993 YTC intends to provide phone service for Prince William Sound.

YTC's concept is simple, from Whittier connect with existing manned, year round accessible sites, which have power, via radio links. YTC has drawn upon Alascom's attempts to provide phone service to hatcheries within the Sound. From Alascom's experience we know that unmanned mountain top repeater sites are impractical, unreliable, and expensive given the Sound's extreme weather conditions. Therefore to provide reliable service it is imperative that base sites have year round access by boat and a fulltime power supply.

YTC has already established a year round radio path between Whittier and Esther Island Hatchery where YTC intends to put a Redcom telephone switch. On Esther Island Optaphone BETRS (Basic Exchange Telephone Radio System) equipment will be connected to the Redcom telephone switch on Esther Island. All phones at the Esther Island Hatchery would be connected to the Redcom switch by standard telephone cable. For other phones through the Sound Optaphone, BETRS equipment will connect them to the switch a Esther Island. The switch a Esther Island will then be connected into Whittier and the existing phone network. Any subscriber who would like phone service within the radius of the base station would be able to have phone service immediately. To extend the range of the base station repeaters will be installed at different sites as customer demand determines.

The monthly price for service would be the same as the local monthly service in Whittier. Toll calls placed over the radio system would be placed at the same rate as those placed from Whittier. The only hold up right now is FCC approval of an adequate number of frequencies to provide acceptable service in Prince William Sound. YTC believes that customers should not have calls blocked because of an inadequate number of frequencies provided by the FCC. An example of inability to service customers adequately is the marine operator at Johnstone Point.

In the summer calls are delayed at Johnstone Point for over twelve hours. This type of service is unacceptable to YTC but without being granted the requested frequencies it could happen. This problem should be resolved soon according to sources at the FCC. So as of present YTC's only real hold up for providing good phone service in Prince William Sound is FCC approval of the requested radio frequencies. Once approved by the FCC approval by the APUC for the service area should soon follow.

The cost of the Prince William Sound Communications package is very small compared with the wide area of coverage and monthly price for access to the national telephone network.

Prince William Sound
Communication Package Costs

Radio Transmission Equipment	
96 Subscriber Units	$219,072
Base Star system 6 Trunks and 96 Subscribers	$48,155
6 Trunks to Whittier	$31,110
3 Trunk Extenders	$15,555
12 Antenna Assemblies	$36,000
Battery package for three days reserve	$7,000
2 Shelf Redcom Switch	$50,000
Self contained building for Esther	$10,000
Towers	$2,500
Installation of system	$25,000
Total Cost	$444,392

The $444,392 would provide a system which could serve over 100 lines through out Prince William Sound reliably. Given the extreme weather conditions of PWS it is difficult to engineer a system which is 100% reliable, but the above system should work as well and be as reliable as the typical phone run on copper wire. Initially there may be some unforeseen problems during start up but once the initial bugs get worked out PWS will have communications. The cost per subscriber is roughly $4400 per loop. This is above the national average for loop costs but given the low subscriber density and large area of coverage the costs are reasonable.

What Yukon Telephone Co. Inc. would request from the Exxon Valdez Oilspill Trustee Council is assistance financing the project. The preferred method of financial assistance would be a long term low interest loan. YTC has proven its ability to provide quality local phone service and has done most of the preliminary permitting, engineering, and testing for communications in Prince William Sound. With the help of the Trustee Council, YTC would like to provide communications within Prince William Sound to make it safer and to promote development, but most of all allow the residents of PWS to have phone service in their homes.

Sincerely,

Don Eller

Don Eller
Yukon Telephone Co. Inc.

15.2.4 149 Z

From: Chris Zadawa
Po Box 464
Annapolis, Md 21404-0464

PLACE
POSTAGE
HERE

EXXON VALDEZ TRUSTEE COUNCIL
1994 Work Plan Work Group
645 "G" Street
Anchorage, Alaska 99501

RECEIVED
JUN 01 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL

RECEIVED
JUL 16 1993
EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

Name: Chris Zabawa
Phone: 410-263-0877

1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	**Archaeology**	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M	X	X	X	X	X	X	X	X	
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M									
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M									
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M									
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M									
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									
17	**Bald Eagle**	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M	X	X	X	X	X	X	X	X	
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M									
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M									
20	**Black Oystercatcher**	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M									
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M									

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Name: C. BABAWA
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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
22	Black Oystercatcher	Restoration Monitoring															
23	Commercial Fishing	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition	X	X	X	$1,100	M									
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources	X	X	X	$385	M									
25		Intensify Management	Fishery Industrial Technology Center	X	X	X	$3,500	1									
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage		X		$150	M									
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation		X		$300	M									
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment	X	X	X	$200	M									
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association	X			$5,000	1									
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery	X			$868	M									
31		Recovery Monitoring	Wild Fish Stock Information Assessment	X	X	X	$50	M									
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island			X	$45	M									
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration	X			$80	M									
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program		X		$50	M									
35		Replace Harvest Opportunities	Red Lake Mitigation			X	$191	M									
36	Common Murre	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity	X	X	X	$280	M									
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement	X	X	X	$51	93 - M									
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study	X	X	X	$73	M									
39		Recovery Monitoring	Common Murre Population Monitoring OUT	X	X	X	$191	M									
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill	X	X	X	$40	M									
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies OUT				$460	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
42	Common Murre	Restoration Monitoring						M									
43	Cutthroat/Dolly	Intensify Management	Cutthroat Trout and Dolly Varden Habitat Restoration	X			$200	M									
44		Intensify Management	Enhanced Management of Cutthroat Trout and Dolly Varden	X			$285	M									
45		Option Not Identified	Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation, and Restoration	X			$35	M									
46		Option Not Identified	Cutthroat Trout and Dolly Varden Hatchery	X			$950	M									
47		Restoration Monitoring						M									
48	General	Administration	Oil Spill Restoration Support Service and Facilities	X	X	X	$600	1									
49		Monitoring	Monitoring of Small Cetaceans (Dall Porpoises) in PWS	X			$200	M									
50		Option Not Identified	Hazardous Material Collection Facility	X	X	X	$100	1									
51		Option Not Identified	Testing of Patch-Response Patch Dependence Hypothesis-Testing of an Ecosystem Model	X	X	X	$488	M									
52		Public Information	Public Broadcasting System Program on Oil Spill	X	X	X	$70	M									
53		Public Information	Publish and Distribute Brochures on Injured Species	X	X	X	$90	M									
54		Public Information	PWS Brochures	X			$65	M									
55		Public Information	PWS Implementation of Interpretive Plan	X			$150	M									
56		Public Information	PWS Large Format Photographic Book	X			$100	M									
57		Public Information	PWS Scenic Byway-- Nomination and Interpretive Plan	X			$70	M									
58		Public Information	PWS Video Programs	X			$100	M									
59		Public Information	Science of the Sound- Education Program	X			$53	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
60	**Harbor Seal**	Cooperative Program-Fishermen															
61		Monitoring	Monitoring Trends in Abundance of Harbor Seals in PWS	X			$39	M									
62		Option Not Identified	Subsistence Harvest Assistance	X			$23	M									
63		Option Not Identified	Habitat Use and Behavior of Harbor Seals in PWS	X			$165	93 - M									
64		Recovery Monitoring	Habitat Use, Monitoring, Population Modelling, and Information Synthesis	X	X	X	$230	M									
65	**Harlequin Duck**	Eliminate Oil from Mussel Beds															
66		Monitoring	Harlequin Duck Recovery Monitoring, Population Modelling and Habitat Information Synthesis	X	X	X	$700	93 - M									
67		Option Not Identified	Quantification of Stream Habitat for Harlequin Ducks from Remotely Sensed Data	X	X	X	$53	M									
68	**Intertidal**	Accelerate Recovery of Intertidal	Deposit Sand on Cleaned Beaches, to Promote Clam Recruitment-Feasibility Study	X	X	X	$20	M									
69		Accelerate Recovery of Intertidal	Fucus Restoration Feasibility Study	X	X	X	$70	M									
70		Accelerate Recovery of Intertidal	Restoration of High-Intertidal Fucus	X	X	X	$300	M									
71		Accelerate Recovery of Intertidal	Beach Subsurface Oil Recovery	X	X	X	$50	M									
72		Accelerate Recovery of Intertidal	Hydrodynamic Purging of Oil from Contaminated Beaches, PWS	X			$500	M									
73		Accelerate Recovery of Intertidal	Rapid Restoration of Weathered Crude Contaminated Beach Subsurface Material	X	X	X	$800	M									
74		Accelerate Recovery of Intertidal	Restore Shorelines Injured by Beach Berm Relocation	X	X	X		M									
75		Monitoring	Coastal Habitat Injury Assessment - Intertidal Algae	X	X	X	$620	M									
76		Monitoring	Fate and Transport of Subsurface Hydrocarbons in Beach Deposits in PWS	X			$600	M									
77		Monitoring	Coastal Habitat Comprehensive Intertidal Monitoring Program	X	X	X	$500	M	X	X	X	X	X	X			X
78		Monitoring	Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet and Shelikof Strait		X	X	$200	M									
79		Monitoring	Intertidal/Shallow Subtidal Crustacean (Decapod) Composition	X	X	X	$275	M									
80		Monitoring	Long-Term Monitoring -Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams	X	X	X	$50	M									
81		Monitoring	Monitoring for Recruitment of Littleneck Clams	X	X	X	$186	M									

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
82	**Intertidal**	Monitoring	Monitoring Sites - Collector Beaches and Lagoons	X	X	X	$500	M									
83		Monitoring	Natural Recovery of Oiled and Treated Shorelines and Monitoring	X	X	X	$600	M									
84		Monitoring	Quantification of Intertidal Algal Recovery Using Multispectral Digital Remote Sensing	X	X	X	$195	M									
85		Monitoring	Recovery Monitoring of Intertidal Oiled Mussel Beds	X	X	X	$500	93 - M									
86		Monitoring	Herring Bay Experimental and Monitoring Studies	X			$495	93 - M									
87		Option Not Identified	Bivalve Shellfish Rehabilitation Project	X	X	X	$860	M									
88		Option Not Identified	Clam Enhancement	X	X	X	$120	M									
89		Option Not Identified	Replacement of Oiled Mussels with Commercially Produced Mussels	X	X	X	$500	M									
90		Option Not Identified	Restoration of Mussel Beds	X	X	X	$500	M									
91		Option Not Identified	Characterization of Near-Shore Bottom Habitat	X	X	X	$237	M									
92	**Killer Whale**	Monitoring	Photo-Identification Studies of PWS Killer Whales	X			$120	93 - M									
93		Monitoring	Recovery Monitoring	X			$125	M									
94		Monitoring	Use of Satellite Transmitters to Investigate Killer Whale Ecology in PWS	X			$180	M									
95		Reduce Fishery Interactions	Change Black Cod Fishery Gear	X				M									
96	**Marbled Murrelet**	Habitat Protection	Identification of Nesting Habitat Criteria and Reproductive Success for Marbled Murrelet	X	X	X	$240	93 - M									
97		Habitat Protection	Survey to Identify Upland Use by Murrelets	X	X	X	$180	93 - M									
98		Habitat Protection	Assessment of Marbled Murrelet Foraging Habitat Requirements During Breeding Season	X	X	X	$250	M									
99		Habitat Protection	Marbled Murrelet Nesting and Feeding Site Characterization and Assessment	X	X	X	$509	M									
100		Minimize Incidental Take															
101		Recovery Monitoring	Determine Status of Marbled Murrelet Populations In Kenai Fjords and Katmai National Parks		X	X	$200	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
102	**Marbled Murrelet**	Restoration Monitoring	Survey to Monitor Recovery of Marbled Murrelets	X	X	X	$250	M									
103	**Multiple Resources**	Habitat Protection	Habitat Modelling	X	X	X	$150	M	X	X	X	X	X	X	X	X	
104		Habitat Protection	Riparian Habitat Assessment	X	X	X	$110	M	X	X	X	X	X	X	X	X	
105		Habitat Protection	Stream Channel Capability Modeling	X	X	X	$110	M	X	X	X	X	X	X	X	X	
106		Habitat Protection	Stream Habitat Assessment	X	X	X	$361	93 - M	X	X	X	X	X	X	X	X	
107		Habitat Protection	Valdez Hazardous Waste Collection	X			$200	1									
108		Habitat Protection	Vegetation and Stream Classification and Mapping	X	X	X	$276	93 - M	X	X	X	X	X	X	X	X	
109		Habitat Protection	Wetland Habitat Classification, Mapping and Assessment	X	X	X	$100	M	X	X	X	X	X	X	X	X	
110		Habitat Protection	Characterization and Identification of Habitat Important to Upland Species	X	X	X	$750	M									
111		Habitat Protection and Acquisition	Inholdings in Alaska Maritime National Wildlife Refuge		X	X	$111	1									
112		Habitat Protection and Acquisition	Inholdings in Alaska Peninsula National Wildlife Refuge			X		1									
113		Habitat Protection and Acquisition	Inholdings in Becharof National Wildlife Refuge			X		1									
114		Habitat Protection and Acquisition	Valdez Duck Flats	X				1									
115		Habitat Protection and Acquisition	Inholdings in Kenai Fjords National Wildlife Refuge		X		$20	1									
116		Habitat Protection and Acquisition	Inholdings in Aniakchak National Monument and Preserve			X		1									
117		Habitat Protection and Acquisition	Kitoi Bay Hatchery Watershed Habitat Acquisition			X	$250	1									
118		Habitat Protection and Acquisition	Acquire Olsen Bay Watershed	X			$3,500	1									
119		Habitat Protection and Acquisition	Acquisition of Inholdings in Shuyak Island State Park			X	$200	1									
120		Habitat Protection and Acquisition	Acquisition of Koniag Corporation Inholdings within the Kodiak National Wildlife Refuge			X	$77,000	1									
121		Habitat Protection and Acquisition	Conservation Easement-Aialik Bay		X		$90	1									
122		Habitat Protection and Acquisition	Conservation Easement-Chugach Bay		X		$60	1									
123		Habitat Protection and Acquisition	Conservation Easement-Dogfish Bay		X		$400	1									
124		Habitat Protection and Acquisition	Conservation Easement-Port Chatham		X		$80	1									
125		Habitat Protection and Acquisition	Conservation Easement-Rock Bay		X		$740	1									
126		Habitat Protection and Acquisition	Habitat Acquisition	X	X	X	$25,000	93 - 1	X	X	X	X	X	X	X	X	
127		Habitat Protection and Acquisition	Habitat Acquisition, Afognak			X	$112,500	1									

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
128	**Multiple Resources**	Habitat Protection and Acquisition	Habitat Acquisition, Kodiak Island			X	$20,000	1									
129		Habitat Protection and Acquisition	Habitat Acquisition, North Afognak Island			X	$4,000	1									
130		Habitat Protection and Acquisition	Kodiak Bear Refuge Stream Mouth Inholdings Acquisition			X	$1,000	1									
131		Increase Natural Food Supply															
132		Intensify Management	Develop Management Strategy for Enhancing Recovery Rate of Bird and Sea Otter Populations	X	X	X	$50	M									
133		Intensify Management	Genetic Risk Assessment of Injured Salmonids	X	X	X	$408	M									
134		Intensify Management	Restoration and Mitigation of Essential Wetland Habitats for PWS Fish and Wildlife	X			$200	M									
135		Intensify Management	Restoration of Second Growth Habitat for Wildlife in PWS	X			$40	M									
136		Intensify Management	Seabird Colony Restoration	X	X	X	$250	M									
137		Intensify Management	Stock Identification of Chum, Sockeye and Chinook Salmon in PWS	X			$250	M									
138		Monitoring	Shoreline Worm Life Monitoring	X	X	X	$388	M									
139		Option Not Identified	Instream Habitat and Stock Restoration Techniques for Anadromous Fish	X	X	X	$416	M									
140		Option Not Identified	Alaska Land and Wildlife Conservation Fund	X	X	X	one billion	M									
141		Option Not Identified	Field Study of Bioremediation Enhancement Treatment Methods	X	X	X	$280	M	X	X	X	X	X	X	X	X	
142		Option Not Identified	Oil Spill Injured Resources Literature Research and Review	X	X	X	$7	M									
143		Option Not Identified	Analyze Natural Resource Damage Assessment Samples Left Un-Analyzed	X	X	X	$650	1									
144		Option Not Identified	Identification of Seabird Feeding Areas from Remotely Sensed Data and Impact on Restoration	X	X	X	$48	M									
145		Option Not Identified	Shoreline Assessment	X	X	X	$250	93 - M									
146		Option Not Identified	Uganik River Fish Counting Weir - Brown Bear and Other Wildlife Food Study			X	$28	M									
147		Recovery Monitoring	Comprehensive Monitoring Program, Plan and Administer	X	X	X	$500	93 - M									
148		Recovery Monitoring	Cook Inlet Comprehensive Monitoring Program		X		$800	M									
149		Recovery Monitoring	Full Funding for Oil Spill Recovery Institute	X	X	X	$2,300	1									
150		Recovery Monitoring	Injured Resource Food Supply	X	X	X	$850	M									
151		Recovery Monitoring	Inventory, Monitor, Protect Permanent Study Sites	X	X	X	$500	M									
152		Recovery Monitoring	Long-Term Monitoring of Marine Environment of Resurrection Bay		X		$600	M									
153		Recovery Monitoring	Migratory Shore Birds Staging in Rocky Intertidal Habitats of PWS	X			$80	M									
154		Recovery Monitoring	Migratory Waterfowl and Shorebird Monitoring	X	X	X	$150	M									
155		Recovery Monitoring	Monitor Population Status of Seabird Nesting Colonies in the Spill Zone	X	X	X	$100	M									
156		Recovery Monitoring	Restoration Recovery Monitoring of Stream-Rearing Anadromous Salmonids	X	X	X	$200	M									
157		Recovery Monitoring	Survey to Determine Abundance Distribution, Habitat, and Food Habits of Staging Shore Birds	X			$35	M									

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158	**Multiple Resources**	Recovery Monitoring	Survey to Determine Distribution, Abundance, and Food Habits of Staging Migratory Waterfowl	X			$91	M									
159		Recovery Monitoring	Surveys to Monitor Marine Bird and Sea-Otter Populations	X	X	X	$275	93 - M									
160		Reduce Disturbance by Field Presence															
161		Reduce Disturbance Through Public Info	Public Information and Education	X	X	X	$316	M									
162		Reduce Disturbance Through Public Info	Publish and Distribute Brochures on Injured Species	X	X	X	$50	M									
163		Restoration Monitoring	Abundance and Distribution of Forage Fish and Their Influence on Recovery of Injured Species	X	X	X	$500	M									
164		Restoration Monitoring	Ecosystem Study	X	X	X	$6,000	M									
165	**Pacific Herring**	Intensify Management	Genetic Stock Identification for Herring in PWS	X			$205	M									
166		Intensify Management	Herring Spawn Deposition, Egg Loss, and Reproductive Impairment	X			$400	M									
167		Intensify Management	PWS Herring Tagging Feasibility Study	X			$112	M									
168		Monitoring	Herring Embryo Viability Evaluation - Natural and Catastrophic Effects	X			$189	M									
169		Monitoring	Larval Herring Age and Growth in PWS Using Otoliths	X			$60	M									
170		Option Not Identified	Enhancement of Pacific Herring	X	X	X	$120	M									
171		Restoration Monitoring															
172	**Pigeon Guillemot**	Monitoring	Pigeon Guillemot Colony Survey	X	X	X	$40	93 - M									
173		Monitoring	Pigeon Guillemot Recovery Enhancement and Monitoring	X	X	X	$180	M									
174		Restoration Monitoring															
175		Temporary Predator Control															

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	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
176	Pink Salmon	Fish Passes and Access	Feasibility of Fish Passes as Oil Spill Restoration	X	X	X	$25	M									
177		Fish Passes and Access	Horse Marine Creek Pink Salmon Restoration			X	$28	1									
178		Fish Passes and Access	Otter Creek Fish Pass	X			$130	1									
179		Fish Passes and Access	Pink Creek Pink Salmon Restoration			X	$11	1									
180		Fish Passes and Access	Sockeye Creek Fish Pass	X			$60	1									
181		Fish Passes and Access	Waterfall Creek Pink Salmon Restoration-Fish Improvement			X	$55	1									
182		Improve Survival Rates	Fry Rearing to Improve Survival and Restore Wild Pink and Chum Salmon Stocks	X	X	X	$727	M									
183		Intensify Management	Adult Tagging to Determine Distribution, Migratory Timing and Rate of Movement of Pink Salmon	X			$495	M									
184		Intensify Management	Coded Wire Tag Recoveries from Commercial Catches in PWS Salmon Fisheries	X			$855	M									
185		Intensify Management	Coded Wire Tagging of Wild Stock Pink Salmon for Stock Identification	X			$500	M									
186		Intensify Management	Inventory and Effect of Straying Hatchery Pink Salmon on Wild Pink Salmon Population	X			$253	M									
187		Intensify Management	Otolith Marking - Inseason Stock Separation Tool to Reduce Wild Stock Salmon Exploitation	X	X	X	$152	M									
188		Intensify Management	Pink Salmon Escapement Enumeration	X	X	X	$705	M									
189		Intensify Management	PWS Salmon Stock Genetics	X			$150	M									
190		Intensify Management	Quality Assurance for PWS Coded Wire Tagging and Fish Production Records	X			$66	M									
191		Monitoring	Investigating and Monitoring Oil Related Egg and Alevin Mortalities	X	X		$686	M									
192		Monitoring	Restoration Monitoring and Preservation of Wild Populations of Pink Salmon	X	X		$899	M									
193		Monitoring	Injury to Salmon Eggs and Pre-emergent Fry in PWS, Laboratory Verification	X			$141	M									
194		Monitoring	Pink Salmon Egg to Pre-Emergent Fry Survival in PWS	X			$385	93 - M									
195		Monitoring	Monitoring Early Marine Growth of Juvenile Salmon in Prince William Sound	X			$50	M									
196		Option Not Identified	Pink Salmon Stream Enhancement in Prince William Sound, Lower Cook Inlet and Kodiak	X	X	X	$300	M									
197	Recreation	Establish Marine Environmental Institute	Build Research and Monitoring Facilities and Program/Cook Inlet, Kodiak		X	X	$1,250	M									
198		Establish Marine Environmental Institute	Oiled Wildlife Rehabilitation Center	X	X	X	$6,000	1									
199		Establish Marine Environmental Institute	Seward Sea Life Center	X	X	X	$40,000	1									
200		Habitat Protection and Acquisition	17(b) Easement Identification-Public Access	X	X	X	$500	M									
201		Habitat Protection and Acquisition	Acquisition of Important Recreation Lands	X	X	X	$500	M									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Doc Num
202	Recreation	Habitat Protection and Acquisition	Acquisition of Recreational Sites on Kodiak Road System			X	$500	1									
203		Habitat Protection and Acquisition	Land Exchange Shuyak for Kodiak Land on Road System			X	$70	1									
204		Habitat Protection and Acquisition	Shelter Cove, Cordova Restoration Project	X			$50	M									
205		Monitoring	Assessment of Economic Injuries to Wilderness-Based Tourism	X	X	X	$100	M									
206		Monitoring	Post-Oil Spill Recreation-Based User Survey for PWS	X			$58	M									
207		Monitoring	Recreation Field Management and Monitoring	X	X	X	$700	M									
208		New Backcountry Recreation Facilities	Enhanced Trail Opportunities, Including Columbia and Blackstone Glacier Trails	X			$150	1									
209		New Backcountry Recreation Facilities	Green Island Cabin Replacement	X			$20	1									
210		New Backcountry Recreation Facilities	Improve Marine Parks	X	X	X	$100	M									
211		New Backcountry Recreation Facilities	Low Impact Recreation Development Nellie Juan, College Fiord Wilderness Study Area	X			$100	1									
212		New Backcountry Recreation Facilities	Prince William Sound Campground	X			$70	1									
213		New Backcountry Recreation Facilities	Public Use Cabins in State Marine Parks	X	X	X	$150	M									
214		New Backcountry Recreation Facilities	PWS Kayak Trail	X			$100	1									
215		New Backcountry Recreation Facilities	PWS Recreation Facilities	X			$250	1									
216		Option Not Identified	Development of Gulf of Alaska Recreation Plan		X	X	$140	1									
217		Option Not Identified	Implement Prince William Sound Area Recreation Plan	X			$400	M									
218		Option Not Identified	Sustainable Tourism in PWS	X			$240	M									
219		Option Not Identified	Watchable Wildlife	X	X	X	$65	M									
220		Option Not Identified	Increased Access PWS	X			$100	M									
221		Plan Commercial Recreation Facilities	Recreation Development	X	X	X	$200	M									
222		Restoration Monitoring															
223		Visitor Center	Bird and Mammal Specimens, University of Alaska Museum	X	X	X	$77	M									
224		Visitor Center	Center for PWS Oil Spill and Natural Resource Education	X				1									
225		Visitor Center	Coastal Habitat Specimens, University of Alaska Museum	X	X	X	$310	M									
226		Visitor Center	Cordova Environmental Education Center	X			$15	1									
227		Visitor Center	Cordova Mini-Imaginarium	X			$63	1									
228		Visitor Center	Develop Video Library of Intertidal Habitat and Biota to Assess Impacts	X	X	X	$155	M									
229		Visitor Center	Environmental Education Center in PWS	X			$90	1									
230		Visitor Center	Environmental Learning Resource Center	X	X	X	$90	1									
231		Visitor Center	Establish Natural Resource Library and Computer Support Technical Service in Cordova	X			$450	1									

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1994 POTENTIAL PROJECT TITLES

	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
232	Recreation	Visitor Center	Information Center	X	X	X	$600	1									
233		Visitor Center	Interpretation of PWS	X			$10	M									
234		Visitor Center	Maritime Wing Valdez Museum	X			$150	1									
235		Visitor Center	Multi-agency Library on PWS and Copper River Delta	X			$150	1									
236		Visitor Center	Valdez Visitor Center	X			$850	1									
237	River Otter	Monitoring	River Otter Recovery Monitoring	X			$180	M									
238		Monitoring	Synthesis of Information on Ecology and Injury to River Otters in PWS	X			$40	M									
239		Restoration Monitoring															
240		Sport/trap Harvest Guidelines	Develop Harvest Guidelines to Aid Restoration of Injured Terrestrial Mammals and Seaducks	X	X	X	$99	1									
241	Rockfish	Intensify Management	Develop a Rockfish Management Plan	X	X		$175	M									
242		Monitoring	Monitoring Injury to Rockfish in PWS	X			$117	M									
243		Monitoring															
244	Sea Otter	Cooporative Prgm-Subsistence Users															
245		Habitat Protection (Public Land)	Habitat Utilization by Sea Otters and Designation of Protected Areas	X	X	X	$83	M									
246		Monitoring	Monitoring of Sea Otter Population Abundance, Distribution, Reproduction, and Mortality	X	X	X	$337	M									
247		Monitoring	Radio-Telemetry Project to Monitor Recovery of Sea Otters	X	X	X	$450	M									
248		Monitoring	Sea Otter Population Dynamics	X	X	X	$291	93 - M									
249		Restoration Monitoring															

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250	**Sea Otter**	Study: Eliminate Oil from Mussel Beds															
251	**Sockeye Salmon**	Fish Passes and Access	Solf Lake Fish Pass	X			$120	M									
252		Intensify Management	Develop and Deploy In-River Hydroacoustic Counters for Sockeye Salmon in the Kenai River		X		$333	M									
253		Intensify Management	Genetic Monitoring of Kodiak Island Sockeye Salmon			X	$275	M									
254		Intensify Management	Genetic Stock Identification of Kenai River Sockeye		X		$500	93 - M									
255		Intensify Management	Kenai River Sockeye Salmon Restoration		X		$1,000	93 - M									
256		Intensify Management	Lower Cook Inlet Sockeye Salmon Restoration and Enhancement		X		$143	M									
257		Monitoring	Ayakulik River Sockeye Salmon Escapement Evaluation			X	$6	M									
258		Monitoring	Sockeye Salmon Overescapement		X	X	$641	93 - M									
259		Option Not Identified	Restoration of the Coghill Lake Sockeye Salmon Stock	X			$165	93 - M									
260		Option Not Identified	Red Lake Salmon Restoration			X	$72	M									
261	**Sport Fishing**	Recovery Monitoring															
262		Replace Harvest Opportunities	Fort Richardson Hatchery Improvement		X		$4,200	1									
263		Restoration Monitoring															
264	**Subsistence**	Access to Traditional Foods															
265		Bivalve Shellfish Hatchery															
266		Option Not Identified	Chenega Bay Subsistence Restoration Project (Remove Oil)	X			$200	M									
267		Option Not Identified	Mariculture Hatchery and Research Center Feasibility Study and Design	X	X	X	$300	1									

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268	Subsistence	Option Not Identified	Mariculture Technical Center	X	X	X	$2,200	1									
269		Option Not Identified	Seward Shellfish Hatchery	X	X	X	$1,300	1									
270		Recovery Monitoring	Survey of Impacted Native Communities-Subsistence	X	X	X	$700	M									
271		Replace Harvest Opportunities	Chenega Bay Replacement Subsistence Resource Project	X			$50	M									
272		Replace Harvest Opportunities	Chenega Chinook and Coho Release Program	X			$55	M									
273		Replace Harvest Opportunities	Port Graham Salmon Hatchery		X		$2,500	1									
274		Replace Harvest Opportunities	Silver Lake Fish Hatchery	X			$1,000	1									
275		Replace Harvest Opportunities	Subsistence Harvest Replacement-Transport Subsistence Users to Unoiled Areas	X	X	X	$55	M									
276		Restoration Monitoring															
277		Subsistence Mariculture Sites	Village Mariculture Project - Oyster Farming	X	X	X	$589	M									
278		Test Subsistence Foods	Assessment and Quality Assurance of Shellfish Resources	X	X	X	$300	M									
279		Test Subsistence Foods	Subsistence Food Safety Testing	X	X	X	$308	93 - M									
280	Subtidal	Habitat Protection	Juvenile Spot Shrimp Habitat Identification	X	X		$110	M									
281		Intensify Management	PWS Spot Shrimp Recovery Management Plan	X			$715	M									
282		Monitoring	PWS Spot Shrimp Survey	X			$90	M									
283		Monitoring	Injury and Recovery of Deep-Benthic Macrofaunal Communities	X	X	X	$275	M									
284		Monitoring	Natural Recovery Monitoring of Subtidal Eelgrass Communities in PWS	X			$265	93 - M									
285		Monitoring	Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources	X	X	X	$390	M									
286		Monitoring	Subtidal Recovery Monitoring	X	X	X	$400	M									
287		Restoration Monitoring	Experimental Studies of Interaction Between Subtidal Epifaunal Invertebrates	X	X	X	$90	M									
288	Technical Services	Administration	Electronic Archiving of Exxon Valdez Records	X	X	X	$450	M									
289		Administration	Geographic Information System Mapping of Natural Resources in Western PWS	X			$75	M									

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290	Technical Services	Administration	Hydrocarbon Data Analysis and Interpretation	X	X	X	$105	93 - M									
291		Administration	Toxicological Profile of PWS	X			$150	M									
292		Public Information	CD-ROM Publication of Digital Spatial Data from Exxon Valdez Oil Spill Mapping Activities	X	X	X	$8	M									
293		Public Information	Database Integration	X	X	X	$148	M									X
294		Public Information	Develop User Friendly Synopsis of Oil Spill Information	X	X	X		M	X	X	X	X	X	X	X	X	
295		Public Information	Providing Public Access to Oilspill GIS Databases Using Arcview in PC Windows Environment	X	X	X	$120	M									
296		Public Information	Public Access Repository for Oil Spill Geographic Information System (GIS)	X	X	X	$100	M									
297		Public Information	User-Friendly GIS and Remote-Sensing Demonstration Center for Public-5 Communities	X	X	X	$72	M									

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#	RESOURCE or SERVICE	RESTORATION OPTION or SUBOPTION	POTENTIAL PROJECTS	REGION PWS	REGION KEN	REGION KOD	EST. COST/YR $K	EST. DURATION (YEARS)	1994	1995	1996	1997	1998	1999	2000	2001	Do Not Fund
1	Archaeology	Acquire Archaeological Artifacts	Archaeological Specimens Collection, University of Alaska Museum	X	X	X	$41	M									
2		Acquire Archaeological Artifacts	Nuchek Heritage Interpretive Center, Design	X			$300	1									
3		Habitat Protection and Acquisition	Archaeological Site Acquisition	X	X	X	$200	M	✓	✓	✓	✓	✓	✓	✓	✓	
4		Intensified Management	Coastal Archaeological Inventory and Evaluation of Archaeological Sites-Interagency	X	X	X	$525	M	✓	✓	✓	✓	✓	✓	✓	✓	
5		Intensified Management	Vandalized Cultural Resources--Inventory, Evaluation, Interpretation	X	X	X	$400	M									
6		Option Not Identified	Restoration of Chenega Village Site	X			$75	1									
7		Option Not Identified	Site-specific Archaeological Restoration - Interagency	X	X	X	$300	93 - M									
8		Public Information	Passports in Time-Cultural Resource Patterns in PWS	X			$230	M									
9		Public Information	Heritage Information Replacement	X	X	X	$200	M									
10		Public Information	PWS Landmarks-Evaluation and Interpretation	X			$400	M									
11		Public Information	Public Education and Interpretation of Archaeological Resource	X	X	X	$400	M									
12		Restoration Monitoring	Study of Petroleum Hydrocarbon Spectra at Selected Sites	X	X	X	$225	M									
13		Site Patrol and Monitoring	Archaeological Site Protection-Public Education-Interagency	X	X	X	$150	M									
14		Site Patrol and Monitoring	Archaeological Site Protection-Site Patrol Monitoring-Interagency	X	X	X	$210	M	✓	✓	✓	✓	✓				
15		Site Stewardship Program	Archaeological Site Stewardship Program	X	X	X	$114	M	✓	✓	✓	✓	✓				
16		Visitor Center	Chugach National Forest Heritage Interpretive Center, Design	X			$1,200	1									
17	Bald Eagle	Habitat Protection	Identification and Protection of Important Bald Eagle Habitats	X	X	X	$262	M									
18		Recovery Monitoring	Bald Eagle Productivity Survey and Catalog	X	X	X	$10	M									
19		Recovery Monitoring	Long-Term Population Monitoring for Bald Eagles	X	X	X	$200	M									
20	Black Oystercatcher	Recovery Monitoring	Black Oystercatcher Interaction with Intertidal Communities	X	X	X	$108	93 - M									
21		Recovery Monitoring	Feeding Ecology and Reproductive Success of Black Oystercatchers in PWS	X			$125	M									

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1994 POTENTIAL PROJECT TITLES

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22	**Black Oystercatcher**	Restoration Monitoring																
23	**Commercial Fishing**	Habitat Protection and Acquisition	Weir And Conservation Land Acquisition		X	X	X	$1,100	M									
24		Intensify Management	Establish an Ecological Basis for Restoring and Enhancing Mixed-stock Salmon Resources		X	X	X	$385	M									
25		Intensify Management	Fishery Industrial Technology Center		X	X	X	$3,500	1									
26		Intensify Management	Model for Capacity of Salmon Production for the Susitna Drainage			X		$150	M									
27		Intensify Management	Susitna River Sockeye Salmon Production Evaluation			X		$300	M									
28		Monitoring	Thirteen Commercial Species Hydrocarbon Contamination and Injury Assessment		X	X	X	$200	M									
29		Option Not Identified	Payoff Debt of Valdez Fisheries Development Association		X			$5,000	1									
30		Recovery Monitoring	Recovery of Coded-Wire Tags from Pink Salmon in Commercial Catches, Hatchery Cost Recovery		X			$868	M									
31		Recovery Monitoring	Wild Fish Stock Information Assessment		X	X	X	$50	M									
32		Replace Harvest Opportunities	Mitigation Fishery at Kitoi Bay Hatchery on Afognak Island				X	$45	M									
33		Replace Harvest Opportunities	Montague Island Chum Salmon Restoration		X			$80	M									
34		Replace Harvest Opportunities	Paint River Fish Ladder Salmon Stocking Program			X		$50	M									
35		Replace Harvest Opportunities	Red Lake Mitigation				X	$191	M									
36	**Common Murre**	Feasibility Study: Improve Nest Sites	Testing of the Feasibility of Enhancing Productivity		X	X	X	$280	M									
37		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Behavioral Attraction and Habitat Enhancement		X	X	X	$51	93 - M									
38		Feasibility Study: Social Stimuli	Restoration of Murres by Way of Transplantation of Chicks-Feasibility Study		X	X	X	$73	M									
39		Recovery Monitoring	Common Murre Population Monitoring	OUT	X	X	X	$191	M									
40		Reduce Disturbance	Reduce Disturbance Near Murre Colonies Injured by the Oil Spill		X	X	X	$40	M									
41		Remove Introduced Species	Removal of Introduced Predators from Bird Colonies	OUT				$460	M									

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