

Fiscal Year 1999 Draft Work Plan

June 1998

Prepared by:

Exxon Valdez Oil Spill Trustee Council

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Fiscal Year 1999

Draft Work Plan

June 17, 1998

Prepared by: Exxon Valdez Oil Spill Trustee Council

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PLEASE COMMENT

You can help the Trustee Council by reviewing this draft work plan and letting them know your priorities for Fiscal Year 1999. To be most useful, your comments should be received by the Council on or before July 27, 1998. However, all comments received prior to final action on the work plan, which is tentatively scheduled for August 13, 1998, will be reviewed by the Council. You can comment by:

Mail:

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401 Anchorage, AK 99501

Attn: Draft Fiscal Year 1999 Work Plan

Telephone:

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Collect calls will be accepted by fishers and boaters who call

through the marine operator.

Fax:

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Attn: Sandra Schubert

Public Hearing:

7 p.m. on July 27, 1998

Access to the public hearing will be available via

teleconference to all communities and villages in the oil spill region. Contact your local Alaska Legislative Information Office or Rebecca Williams at the telephone numbers above

if you would like to participate.

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Dear Reviewer,

Each year the Exxon Valdez Oil Spill Trustee Council funds activities to restore the resources and services injured by the 1989 Exxon Valdez oil spill. Public input is an essential part of the Trustee Council's decision-making process. This draft work plan has been prepared to solicit your comments on which activities to fund in Fiscal Year 1999. Comments on the draft plan will be most useful to the Council if received by July 27. The Council is tentatively scheduled to make its decision on August 13.

FY 99 marks the 10-year anniversary of the oil spill. The Trustee Council has begun planning for a major symposium to be held March 23-27, 1999 at the Egan Convention Center in Anchorage. The symposium will provide an opportunity for the Council to report to the public about the status of recovery a decade after the 1989 oil spill, as well as provide an accounting of the restoration program's activities. In anticipation of this event, the status of the resources and services injured by the spill will be formally updated in FY 99. In addition, synthesizing and modeling the results of ten years of research will be a priority, so that we can have a better understanding of the marine ecosystem affected by the spill.

The FY 99 draft work plan also continues themes begun in earlier years: monitoring the recovery status of species injured by the oil spill (such as the marine bird boat surveys), research into factors that may be persisting in limiting the recovery of injured resources (such as studies of harbor seal health and diet), and research that should lead to long-term improvements in resource management (such as the pink salmon genome project). With an eye toward 2001, when the final payment from Exxon Corporation will be received, in FY 99 the Trustee Council will deliberate whether and how the Restoration Reserve might be used to support research and monitoring of injured resources in the future.

The collection of projects recommended for funding in FY 99 continues the Trustee Council's commitment to community involvement in the restoration process. The Youth Area Watch, which involves local youth in ongoing restoration projects, and the Community Involvement Project, which funds a network of local liaisons in oil spill communities, are both recommended for continuation in FY 99. Two new research projects recommended for funding (the abundance and distribution of spot shrimp and fall-winter-spring surveys of harbor seals) were initiated by, and would be conducted in part by, local subsistence users. Several of the projects recommended for funding (for example, the investigation of surf scoters, the Sound Ecosystem Assessment herring component, and the harbor seal biosampling effort) include traditional and local knowledge in their study designs.

Also of interest, the funding recommendation includes eight projects that would be conducted at the Alaska SeaLife Center in Seward. The SeaLife Center, which was funded in part by the Trustee Council, had its grand opening in May 1998. It provides unique, technologically advanced facilities for research on marine mammals, fish and seabirds.

A continuing trend worth highlighting is the decrease in the size of the research, monitoring, and general restoration program. The Trustee Council has adopted a declining schedule of expenditures through the year 2002 to coincide with the final payment from Exxon Corporation in 2001. This means that the administrative costs of the program are declining (from \$2.8 million in FY 98 to \$2.5 million in FY 99), as is the amount of money available to fund research, monitoring, and general restoration activities (from \$14 million in FY 98 to \$10-12 million in FY 99). Agency project management costs are also scheduled to decline.

A final comment concerns some activities that are not funded through this work plan, but which help to complete the picture of the Trustee Council's restoration effort.

- The Council's program to protect habitat important to the recovery of injured resources and services is continuing. Recent actions include final closing on a \$34.6 million package to protect 69,814 acres of land owned by the Tatitlek Corporation and an agreement with Afognak Joint Venture to protect about 41,750 acres of land on northern Afognak Island for \$70.5 million.
- The Council plans to make an additional \$12 million deposit into the Restoration Reserve in FY 99, bringing the total in the reserve account to \$72 million plus interest. This past spring, the Council conducted an extensive outreach effort to solicit public comment on use of the reserve. A special edition of the Council's newsletter was published and workshops were held in 19 communities in the spill area as well as Anchorage, Fairbanks, and Juneau. In all, over a thousand comments were received and are currently under consideration by the Council.

As always, I am interested in your thoughts and ideas in regard to the draft work plan, as well as on our restoration efforts in general. Comments on the work plan will be most useful if they are received by July 27, but I welcome hearing from you at any time. Also contact me if you would like more information on any of the projects discussed in the draft work plan or about the restoration program in general.

Sincerely,

Molly McCammon Executive Director

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Each year the *Exxon Valdez* Oil Spill Trustee Council funds activities to restore the resources and services injured by the 1989 *Exxon Valdez* oil spill. This draft work plan describes restoration activities being considered for federal Fiscal Year 1999 (October 1, 1998 through September 30, 1999).

The Trustee Council has not decided which projects to fund. They will make their decision on or about August 13, 1998, using comments from the public and the Public Advisory Group, evaluations of independent scientific reviewers and legal advisors, and recommendations from the Executive Director.

Milestones in development of the FY 99 work plan are described in Table 1. The work plan process begins each year with a restoration workshop. The Trustee Council usually makes funding decisions in August so that projects can begin on October 1.

Table 1. Milestones for FY 99 Work Plan

	Jan. 29-30, 1998	Annual Restoration Workshop discussed results of FY 97 work and directions for FY 99.
	Feb. 15, 1998	Invitation to Submit Restoration Proposals for Federal Fiscal Year 1999 was issued.
	April 15, 1998	The Restoration Office received 142 proposals requesting \$25.6 million for FY 99.
	May 17-19, 1998	Chief Scientist and core reviewers met to discuss the scientific and technical merits of proposals.
	May 28, 1998	Executive Director discussed proposals with Trustee agencies, Chief Scientist, and Public Advisory Group representatives and drafted preliminary recommendations.
	June 2, 1998	Public Advisory Group discussed proposals and preliminary recommendations and advised Executive Director.
□>	June 17, 1998	Draft Work Plan for FY 99 is distributed for public comment.
:	July 27, 1998	Public hearing will be held on <i>Draft Work Plan for FY</i> 99.
	July 28, 1998	Public Advisory Group will meet to advise Trustee Council on final work plan.
	Aug. 13, 1998	Trustee Council is expected to decide on <i>Final Work</i> Plan for FY 99.
	Oct. 1, 1998	FY 99 fiscal year will begin.

After considering the cash flow for restoration funds, the Trustee Council has tentatively set a funding target of \$10-12 million for the FY 99 work plan, which includes all research, monitoring, and general restoration projects. As illustrated in Table 2, the target for the annual work plan is lower in FY 99 than in FY 98 and will continue to decline through FY 2002, when the final payment from Exxon Corporation will be spent and funding for the restoration program will rely solely on the Restoration Reserve.

Table 2. Tentative Work Plan Funding Targets FY 96 and Beyond

	FY 96	\$18.2 million (authorized)
	FY 97	\$16.2 million (authorized)
İ	FY 98	\$14.0 million (authorized)
८>	FY 99	\$10.0-12.0 million
"	FY 00	\$10.0 million
	FY 01	\$ 8.0 million
	FY 02	\$ 6.0 million
	FY 03 +	Restoration Reserve

This section summarizes the Executive Director's preliminary recommendations for FY 99. These recommendations are made for public review and may be revised before they are provided to the Trustee Council in early August.

Research, Monitoring, and General Restoration Projects

For FY 99, the Trustee Council received 142 proposals totaling \$25,641,700 for research, monitoring, and general restoration projects, which are the subject of this draft work plan. The Council has set a target of \$10-12 million for the FY 99 work plan. The Executive Director's preliminary recommendation of which proposals should be funded is summarized in Table 3.

Table 3. Summary of Executive Director's Preliminary Recommendation:
Research, Monitoring, and General Restoration Projects

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Category	Explanation	No. Proj.	FY 99 Cost
Fund	Project has high technical merit with significant contribution toward achieving restoration objectives. Project recommended for Trustee Council approval.	14	\$2,739,800
Fund Contingent	Same as above except that certain issues need to be resolved before funding is approved. Project recommended for Trustee Council approval if these issues can be resolved.	54	\$6,981,100
Defer Decision	A decision on whether or not to fund project in FY 99 cannot be made without more information. In many cases, needed information will not be available until after this summer's field season. For such projects, a recommendation will be made to the Trustee Council in December 1998.	12	\$1,470,400
	Total:	80	\$11,191,300
Do Not Fund	Project not recommended for funding in FY 99. In some cases, it is recommended that a project be reconsidered in the future. In other cases, the project is not legally permissible, has technical problems, or would not significantly contribute to restoration objectives.	62	\$0

The sum of the projects in the *fund, fund contingent*, and *defer decision* categories is \$11,191,300. This amount is within the \$10-12 million target identified by the Trustee Council. Prior to Trustee Council action on the FY 99 work plan, project

budgets will be reviewed further for possible cost reductions. In addition, it is possible that some projects in the *fund contingent* category will not be funded because their issues will not be resolved, and some projects in the *defer* category will not prove feasible or appropriate when additional information is evaluated. Finally, further review may result in some projects currently recommended for funding not being recommended in August, or not being approved by the Trustee Council.

Of the projects in the *fund, fund contingent,* and *defer decision* categories, many are continuing efforts also funded by the Trustee Council in FY 98. As illustrated in Table 4, several new projects are also being recommended for funding.

Table 4. Summary of Executive Director's Preliminary Recommendation:
New and Continuing Projects (Fund, Fund Contingent, and Defer)

	Number of Projects Recommended for Funding	Total Cost of Projects Recommended for Funding
New Projects	26	\$2,608,800
Continuing Projects	54	\$8,582,500

Other Projects

In addition to funding projects through the annual work plan, in FY 99 the Trustee Council will approve funds for the administrative costs of the restoration program (primarily public information, independent scientific review, and administration), habitat protection support (such as negotiations, land surveys, and appraisals related to the Council's large parcel and small parcel acquisition programs), and the Restoration Reserve. The Council will also consider approving funds for two proposals submitted for capital construction projects in FY 99.

Table 5 summarizes these "other projects." Funds approved for these projects will be in addition to the \$10-12 million work plan. Public comment is being sought on these other projects as well as on the work plan itself.

Table 5. Summary of Executive Director's Preliminary Recommendation:
Other Projects

Project	FY 99 Request	FY 99 Exec. Dir. Recommendation
Public Information/Science Management/Administration (99100)	\$2,493.3	Fund, but continue budget review
Habitat Protection Support (99126)	\$756.7	Fund contingent on further budget review
Kodiak Island Borough Waste Management Plan (99304)	\$1,846.8	Fund contingent on more complete project description and budget
Port Graham Hatchery (99405)	\$777.5	Defer decision pending legal review and additional information on design and cost
Restoration Reserve (99424)	\$12,000.0	Fund

Highlights

Synthesis and Modeling

FY 99 will be the closeout year (that is, final data analysis and report/manuscript writing) for two of the Trustee Council's major ecosystem studies: the Sound Ecosystem Assessment (SEA, Project 99320) and the Nearshore Vertebrate Predator project (NVP, Project 99025). Other multi-year studies, such as the pink salmon embryo mortality and pink salmon genetics projects, are also closing out in FY 99. In addition, a number of projects, for example the marine bird boat surveys and the harbor seal monitoring effort, have accumulated several years of data. Consequently, the FY 99 draft work plan continues the Council's emphasis on the synthesis of project results and the development of models that use the results to explain and predict ecosystem processes.

Project 99300 would continue the Chief Scientist's work with long-time peer reviewers who are preparing synthesis manuscripts on impacts to intertidal communities and commercially important fish species. Funds also would be included in FY 99 for the Chief Scientist to further develop preliminary concepts for a potential long-term research and monitoring program. Project 99330 would complete construction and validation of two models of trophic interactions among the organisms of Prince William Sound. These food-web models will help synthesize existing research and monitoring results, help develop predictive tools that may be used to examine the impacts of large-scale disturbances (such as oil spills) in the ecosystem, and help the public understand how the marine ecosystem functions. The model is being constructed by an internationally-recognized scientific

team working with EVOS researchers. In addition to these synthesis efforts, funding is being recommended in FY 99 for several researchers to prepare synthesis manuscripts on their multi-year study efforts for publication in the peer reviewed literature.

The goal for the completion of these synthesis and modeling efforts is the 10th Anniversary Symposium, which will be held March 23-27, 1999 at the Egan Convention Center in Anchorage. This five-day public symposium, jointly sponsored by the Trustee Council, the Alaska Sea Grant Program, and the Prince William Sound Regional Citizens' Advisory Council, will open with an overview session on the oil spill and the restoration program, followed by a series of technical sessions.

Alaska SeaLife Center

Eight projects that would be conducted at the Alaska SeaLife Center are recommended for funding in FY 99: Project 99190/Pink Salmon Genome, Project 99252/Genetics of Rockfish and Pollock, Project 99327/Pigeon Guillemot Research, Projects 99341 and 99441/Harbor Seal Health and Diet, Project 99348/Response of River Otters to Oil Contamination, Project 99371/Harbor Seal Metabolism, and Project 99432/Effects of Crude Oil on Intertidal Fish. The SeaLife Center had its grand opening in May 1998. The Trustee Council contributed \$26 million to the SeaLife Center's construction.

Community Initiatives

Again this year, the Trustee Council, through its network of ten local facilitators, solicited proposals from communities in the oil spill area. A total of 27 restoration proposals were submitted by communities or at the request of communities. Although several of the projects proposed were determined to have a weak link to restoration or otherwise not be appropriate for Council funding, 13 of the projects are in the *fund*, *fund contingent*, or *defer* categories.

Three new community proposals are recommended for funding: Project 99401 would study the abundance and distribution of spot shrimp in Prince William Sound. Project 99444 would provide funding to the Alaska Native Harbor Seal Commission for a one-year pilot project to conduct fall-winter-spring surveys to investigate seasonal distribution and activities of harbor seals. Project 99514 would improve handling of used oil in spill-affected villages on the southern Kenai Peninsula. In addition, two continuing projects would be expanded in scope. Project 99052A/Community Involvement would be expanded to enlist high school students on Kodiak Island as community facilitators for their villages. Project 99210/Youth Area Watch would be expanded to include the participation of students from Port Graham, Nanwalek, and Seldovia.

Archaeological Repositories

On December 18, 1997, the Trustee Council adopted a resolution regarding funding for archaeological repositories in Prince William Sound and the lower Kenai Peninsula. The resolution directed the Trustee Council's Executive Director to invite comprehensive proposals for a single regional repository in one of the eight communities in the region (Cordova, Tatitlek, Chenega Bay, Valdez, Nanwalek, Port Graham, Seldovia, Seward) at a cost not to exceed \$1 million, local display facilities in the remaining seven communities at a total cost not to exceed \$1.6 million, and traveling exhibits at a cost not to exceed \$200,000.

On April 30, 1998, the Alaska Department of Natural Resources, on behalf of the Trustee Council, issued a request for competitive grant proposals for the purpose of developing a regional repository, local display facilities, and traveling exhibits to store and display archaeological artifacts and other cultural materials related to restoration of injury resulting from the oil spill. Proposals are due by August 7, 1998. After the proposals have been evaluated, the Council will consider the recommendation of the evaluation committee and decide whether to authorize funds for this project. If the project is funded, work is expected to begin early in FY 99 and conclude by September 30, 2001. Funds for the project would be awarded and administered separately from the FY 99 work plan.

Habitat Protection

The Trustee Council funds the acquisition and protection of land in order to protect the habitat of injured resources and services. Project 99126 would continue the support services necessary for these land acquisitions, such as title reports, appraisals, on-site inspections, hazardous materials surveys, land surveys and timber cruises. The estimated cost of these services for FY 99 is \$756,700, although the actual cost will depend on future Council decisions about land acquisitions and the progress of negotiations.

As of June 1998, the Council has committed \$224 million to protect 520,000 acres of land in large parcels (over 1,000 acres each), including inholdings in Kachemak Bay State Park, land adjacent to Seal Bay/Tonki Cape on Afognak Island, commercial timber rights on land along Orca Narrows, an extensive parcel on Shuyak Island, and lands owned by Akhiok-Kaguyak, Inc., Old Harbor Native Corporation, Koniag, Inc., Chenega Bay Corporation, English Bay Corporation, and Tatitlek Corporation. The Council has also authorized \$115.5 million toward the protection of an additional 117,000 acres of land from the Afognak Joint Venture and Eyak Corporation.

The Council has spent \$13.9 million to protect 3,667 acres of land in 37 small parcels (less than 1,000 acres each). Owners of three additional parcels (181 acres) have signed purchase agreements for a total of \$500,000. In addition, the

Council has agreed to contribute \$4 million to an agreement between the Kenai Natives Association and the U.S. Department of the Interior whereby 3,254 acres of private land will be transferred to the federal government for inclusion in the Kenai National Wildlife Refuge. Acquisition of 14 additional small parcels is still under consideration by the Council.

Restoration Reserve

In recognition of the fact that complete recovery from the oil spill may not occur for decades, the Trustee Council established the Restoration Reserve to hold funds to be used for restoration after the last annual payment is received from Exxon Corporation in September 2001. The \$12 million recommended for deposit in FY 99 would be the sixth deposit into the reserve account and would bring the total in the account to \$72 million plus interest. Annual deposits of \$12 million in each of the next three years would provide a reserve of \$108 million plus interest. These funds will be used for restoration activities.

During FY 98, the Council conducted an extensive outreach effort to solicit public comment on the reserve. A special edition of the Council's newsletter was published and public workshops were held in 19 communities in the spill area as well as Anchorage, Fairbanks, and Juneau. In all, over a thousand comments were received and are currently under consideration by the Council.

Public Information, Science Management, and Administration
This component includes funds for the independent scientific peer review of project proposals and results, the Trustee Council's 17-member Public Advisory Group, the Oil Spill Public Information Center (now part of the Alaska Resources Library and Information Services), communication efforts such as the Council's newsletter and radio program, operations and staff support for the Council itself, and a variety of smaller items.

The cost of this component will decline again in FY 99 -- from \$4.2 million in FY 95, \$3.4 million in FY 96, \$2.9 million in FY 97, \$2.8 million in FY 98, to \$2.5 million in FY 99. Further reductions are expected through FY 2002.

Description of Projects and Recommendations

A project-by-project list of the Executive Director's preliminary recommendations follows.

<u>Spreadsheet A</u> is a summary spreadsheet which shows FY 99 and future years' costs of research, monitoring, and general restoration projects recommended as *fund*, *fund contingent*, or *defer decision*. (Note: A "\$0" in the spreadsheet means that no funding is recommended. A blank space means that the estimated funding level is not yet known or that a recommendation on funding has not been made.)

<u>Spreadsheet B</u> describes each project received by the Trustee Council (research, monitoring, and general restoration projects as well as other projects), and contains the text of the Chief Scientist's and the Executive Director's preliminary recommendations. It also indicates who proposed each project, which Trustee agency would be responsible for project management, and whether the project is continuing (i.e., was also funded by the Council in FY 98) or new.

		FY99	Prel	iminary Rec	ommendation	<u>on</u>	Total	
Proj. No.	Project Title	Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
Pink Salmo	on	\$1,893.6	\$654.8	\$297.3	\$46.0	\$5.0	\$1,003.1	
99139Å2	Port Dick Spawning Channel	\$85.8	\$85.8	\$47.0	\$10.0	\$5.0	\$147.8	Fund
99188-CLO	Otolith Thermal Mass Marking	\$119.9	\$118.8	\$0.0	\$0.0	\$0.0	\$118.8	Fund contingent
99190	Linkage Map for the Pink Salmon Genome	\$187.3	\$187.3	\$187.3	\$0.0	\$0.0	\$374.6	Fund contingent
99191A-CLO	Oil-Related Embryo Mortalities	\$58.9	\$58.4	\$0.0	\$0.0	\$0.0	\$58.4	Fund contingent
99196-CLO	Genetic Structure	\$50.0	\$48.2	\$0.0	\$0.0	\$0.0	\$48.2	Fund contingent
99329-CLO	Synthesis of Toxicological Impacts	\$52.5	\$51.3	\$0.0	\$0.0	\$0.0	\$51.3	Fund contingent
99365	Straying of Hatchery-Released Pinks in PWS	\$147.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99366	Remote Video and Time-Lapse Recording	\$60.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99367	Synthesis and Publication of Fisheries Research	\$53.2	\$20.0				\$20.0	Fund contingent
99443-BAA	Salmon Fisheries Market Value Recovery Program	\$691.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99476	Effects of Oiled Incubation on Reproduction	\$74.1	\$85.0	\$63.0	\$36.0	\$0.0	\$184.0	Fund contingent
99489	Crude Oil Effects on Smolts	\$105.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99491-BAA	Effects of Natural Oil Seeps	\$206.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Pacific Her	ring	\$1,678.1	\$704.9	\$0.0	\$0.0	\$0.0	\$704.9	
99162A	Herring Disease Manuscripts (Kocan)	\$58.6	\$58.6	\$0.0	\$0.0	\$0.0	\$58.6	Fund
99162B	Herring Disease Manuscripts (Kennedy)	\$13.4	\$13.4	\$0.0	\$0.0	\$0.0	\$13.4	Fund
99311	Productivity Dependencies: Stable Isotopes	\$104.5	\$90.0	\$0.0	\$0.0	\$0.0	\$90.0	Fund contingent
99328	Synthesis of Impacts on Pacific Herring	\$79.3	\$35.0	\$0.0	\$0.0	\$0.0	\$35.0	Fund contingent
99375	Effects of Egg Distribution and Ecology	\$90.3	\$50.0		\$0.0	\$0.0	\$50.0	Fund contingent
99376	Effects of Distribution of Forage Fish	\$153.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99378	Improving Population Models	\$384.3	\$232.8				\$232.8	Defer
99411	Overwintering During El Nino	\$199.6	\$0.0	\$0.0	\$0.0	\$0.0		Do not fund
99438-BAA	Biomass of Herring and Pollock: Post-El Nino Changes	\$211.8	\$0.0	\$0.0	\$0.0	\$0.0		Do not fund
99462	Effects of Disease on Population Recovery	\$75.1	\$75.1			\$0.0		Fund
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		FY99	Preli	minary Reco	ommendation	<u>on</u>	Total	
Proj. No.	Project Title	Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
99463	Effects of Disease on Spawner Recruitment	\$94.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99468-BAA	Estimations of Acoustic Target Strength	\$213.5	\$150.0	\$0.0	\$0.0	\$0.0	\$150.0	Fund contingent
SEA and R	elated Projects	\$2,324.6	\$1,158.0	\$73.6	\$67.2	\$0.0	\$1,298.8	
99195	Pristane Monitoring in Mussels	\$96.7	\$100.0			-	 \$100.0	Fund contingent
99320-CLO	Sound Ecosystem Assessment (SEA)	\$744.4	\$727.1	\$16.1	\$0.0	\$0.0	\$743.2	Fund contingent
99320M-CLO	Observational Oceanography	\$76.4	\$62.5	\$0.0	\$0.0	\$0.0	\$62.5	Fund contingent
99320N-BAA	Acoustic Assessments	\$74.9	\$52.0	\$0.0	\$0.0	\$0.0	\$52.0	Fund contingent
99340	Long-Term Oceanographic Monitoring	\$92.0	\$91.4	\$57.5	\$67.2	\$0.0	\$216.1	Fund contingent
99361-BAA	Graphical Techniques for Synthesis/Communication	\$95.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99393-BAA	Food Webs: Structure and Change	\$221.7	\$125.0				\$125.0	Defer
99431-BAA	Prototype Modeling Products	\$338.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99435-BAA	Oceanography of Prince William Sound	\$208.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99436-BAA	Oceanography: Effects of El Nino	\$103.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99467-BAA	Interannual Variability of Pelagic Production	\$272.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Cutthroat 1	rout, Dolly Varden, and Other Fish	\$1,262.4	\$258.0	\$0.0	\$0.0	\$0.0	\$258.0	
99043B-CLO	Cutthroat and Dolly Habitat Improvement Monitoring	\$9.5	\$8.0	\$0.0	\$0.0	\$0.0	 \$8.0	Fund
99145-CLO	Cutthroat and Dolly: Relationships Among Forms	\$73.0	\$50.0	\$0.0	\$0.0	\$0.0	\$50.0	Fund contingent
99252	Genetic Investigations of Rockfish and Pollock	\$263.7	\$200.0				\$200.0	Fund contingent
99354	Habitat-Based Population Assessment of Rockfish	\$236.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99383	Distribution of Cutthroat and Dolly	\$25.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99408-BAA	Salmon Shark Ecology	\$283.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99409	Salmon Shark Diet and Predation on Injured Resources	\$91.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99425	Underwater Video: Rockfish Distribution and Habitat	\$36.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99472	Cutthroat and Dolly Growth Rates	\$242.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
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	FY99	Prel	iminary Rec	ommendati	<u>on</u>	Total]
Project Title	Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
ls	\$773.0	\$712.3	\$496.1	\$193.1	\$0.0	\$1,401.5	
r Whale Investigation	\$85.4	\$85.4			\$0.0	\$85.4	Fund contingent
oor Seal Monitoring, Habitat, Trophics	\$264.8	\$264.3	\$130.0	\$0.0	\$0.0	\$394.3	Fund contingent
oor Seal Health and Diet	\$133.4	\$125.1	\$132.8	\$91.4	\$0.0	\$349.3	Fund contingent
oor Seal Metabolism/Stable Isotopes	\$105.9	\$105.9	\$101.7	\$101.7	\$0.0	\$309.3	Fund contingent
oor Seal Diet: Lipid Metabolism and Health	\$131.6	\$131.6	\$131.6	\$0.0	\$0.0	\$263.2	Fund contingent
enile Harbor Seal Physiological Condition	\$51.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
system	\$2,637.4	\$1,574.3	\$35.0	\$0.0	\$0.0	\$1,609.3	
rshore Vertebrate Predators (NVP)	\$706.2	\$500.0	\$0.0	\$0.0	\$0.0	\$500.0	Fund contingent
d Mussel Bed Monitoring	\$180.0	\$150.0	\$35.0	\$0.0	\$0.0	\$185.0	Fund contingent
Otter Population Structure/Condition, Habitat Use	\$87.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
us of Black Oystercatchers	\$232.6	\$232.6	\$0.0	\$0.0	\$0.0	\$232.6	Defer
rocarbon Database	\$58.9	\$58.9				\$58.9	Fund contingent
tidal/Subtidal Manuscript Preparation	\$44.0	\$40.9	\$0.0	\$0.0	\$0.0	\$40.9	Fund contingent
ponse of River Otters to Oil Contamination	\$222.9	\$207.1	\$0.0	\$0.0	\$0.0	\$207.1	Fund contingent
essment of Risk to Residual Oil Using P450	\$121.3	\$121.3	\$0.0	\$0.0	\$0.0	\$121.3	Defer
athered Oil Effects on Sediment Microorganisms	\$106.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
ulation Change in Nearshore Vertebrate Predators	\$477.0	\$60.0				\$60.0	Fund contingent
cts of Oil on High Cockscomb	\$66.4	\$66.4				\$66.4	Defer
r Otter Gender-Specific Response to Oil	\$90.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
idual Oiling of Armored Beaches/GOA	\$195.5	\$125.0		\$0.0	\$0.0	\$125.0	Fund contingent
ow's Goldeneye Recovery Status	\$12.2	\$12.1				\$12.1	Defer
k Oystercatcher Abundance and Reproduction	\$36.1		\$0.0	\$0.0	\$0.0	\$0.0	Defer
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	·	FY99 Request		liminary Rec			Total	
Proj. No.	Project Title	request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
Seabird/Fo	orage Fish and Related Projects	\$3,423.3	\$2,611.1	\$1,254.5	\$95.1	\$0.0	\$3,960.7	
99144A	Common Murre Population Monitoring	\$72.6	\$72.6	\$72.6	\$0.0	\$0.0	\$145.2	Fund
99159	Boat Surveys	\$37.0	\$37.0				\$37.0	Fund
99163	Alaska Predator Ecosystem Experiment (APEX)	\$1,986.1	\$1,986.1	\$900.1	\$0.0	\$0.0	\$2,886.2	Fund
99169	Genetics of Murres, Guillemots, Murrelets	\$92.7	\$86.2	\$13.8	\$0.0	\$0.0	\$100.0	Fund contingent
99287-BAA	Seabird/Oceanographic Relationships; GLOBEC	\$222.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99306	Ecology and Demographics of Sand Lance	\$30.0	\$30.0	\$20.0	\$0.0	\$0.0	\$50.0	Fund
99327	Pigeon Guillemot Research	\$158.0	\$158.0	\$167.7	\$95.1	\$0.0	\$420.8	Fund contingent
99338	Adult Murre/Kittiwake Survival	\$57.9	\$57.9	\$45.0	\$0.0	\$0.0	\$102.9	Fund
99346	Publication of Sand Lance Bibliography	\$10.3	\$10.3	\$0.0	\$0.0	\$0.0	\$10.3	Fund contingent
99347	Fatty Acid Profile/Lipid Class Analysis	\$105.4	\$92.6	\$35.3	\$0.0	\$0.0	\$127.9	Fund contingent
99381	Status of Seabird Colonies in Northeastern PWS	\$13.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99406	Phytoplankton Production and Sand Lance	\$106.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99434	East Amatuli Island Video Link	\$80.4	\$80.4				\$80.4	Defer
99442-BAA	Kittlitz's Murrelet: Population Trends and Productivity	\$231.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99479	Effects of Food Stress on Survival and Reproduction	\$100.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99488	ACCESS Database	\$119.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Archaeolo	gical Resources	\$173.3	\$166.7	\$0.0	\$0.0	\$0.0	\$166.7	
99007A	Archaeological Index Site Monitoring	\$151.5	\$151.5				\$151.5	Fund
99149-CLO	Archaeological Site Stewardship	\$15.2	\$15.2	\$0.0	\$0.0	\$0.0	\$15.2	Fund
99298	Brochure on Archaeology at Alaska SeaLife Center	\$6.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Subsisten	ce	\$3,591.6	\$1,277.2	\$421.6	\$307.0	\$304.3	\$2,310.1	
99052A	Community Involvement	\$255.7	\$241.8	\$180.0	\$180.0	\$180.0	\$781.8	Fund contingent
99052B	Traditional Knowledge	\$70.8	\$0.0				\$0.0	Do not fund
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		FY99	Prel	iminary Rec	ommendati	<u>on</u>	Total	
Proj. No.	Project Title	Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
99127-CLO	Tatitlek Coho Salmon Release	\$10.7	\$10.7	\$0.0	\$0.0	\$0.0	\$10.7	Fund contingent
99131 -	Clam Restoration	\$285.4	\$285.4	\$0.0	\$0.0	\$0.0	\$285.4	Defer
99210	Youth Area Watch	\$139.5	\$139.5	\$123.1	\$107.0	\$96.3	\$465.9	Fund contingent
99225	Port Graham Pink Salmon Project	\$75.6	\$75.6	\$75.0	\$0.0	\$0.0	\$150.6	Fund contingent
99245	Community-Based Harbor Seal Biosampling	\$85.9	\$70.0				\$70.0	Fund contingent
99247	Kametolook River Coho Salmon	\$20.8	\$19.6	\$20.0	\$20.0	\$28.0	\$87.6	Fund contingent
99256B	Solf Lake Sockeye Salmon Stocking	\$68.3	\$68.3				\$68.3	Fund
99263	Port Graham Salmon Stream Enhancement	\$67.2	\$42.0	\$23.5	\$0.0	\$0.0	\$65.5	Fund contingent
99273	Surf Scoter Life History and Ecology	\$237.6	\$185.0		\$0.0	\$0.0	\$185.0	Fund contingent
99333	Sea Otter Monitoring	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99335	Nanwalek Sockeye Hatchery		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99401	Spot Shrimp Population	\$70.1	\$70.1			\$0.0	\$70.1	Defer
99410	Lower Cook Inlet Youth Area Watch		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Combine w/210
99416	O'Brien Creek Restoration	\$19.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99444	Community-Based Harbor Seal Research	\$69.2	\$69.2	\$0.0	\$0.0	\$0.0	\$69.2	Fund contingent
99483	Seldovia Coho Salmon Enhancement		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99484	Chignik Lake Subsistence Building and Sod House	\$341.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99485	Port Graham Youth Subsistence Education	\$10.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99497	Chenega Bay Subsistence Processing Building	\$64.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99502	Eyak Subsistence Meeting Hall	\$400.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99503	Restoration of Orca Inlet	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99507	Nuchek Subsistence Camp	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99508	Copper River Salmon Run Data Improvements	\$436.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99521	Lower Cook Inlet Salmon Ecology	\$112.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
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		FY99		minary Rec			Total	
Proj. No.	Project Title	Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
Reduction	of Marine Pollution	\$1,236.1	\$50.0	\$0.0	\$0.0	\$0.0	\$50.0	
99391	Information Management/Monitoring System	\$675.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99415	Community Awareness Video and Manual	\$81.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99514	Nanwalek and Port Graham Marine Pollution Reduction	\$278.1	\$50.0		\$0.0	\$0.0	\$50.0	Fund contingent
99515	Lower Kenai Peninsula Marine Pollution Reduction	\$200.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Habitat Im	provement	\$2,004.5	\$457.7	\$0.0	\$0.0	\$0.0	\$457.7	
99180-CLO	Kenai Habitat Restoration	\$330.1	\$299.6	\$0.0	\$0.0	\$0.0	\$299.6	Fund contingent
99230	Valdez Duck Flats Management Plan	\$69.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99314	Homer Mariner Park	\$102.1	\$99.5	\$0.0	\$0.0	\$0.0	\$99.5	Fund contingent
99339	Western PWS: Human Use/Wildlife Disturbance Model	\$70.2	\$58.6	\$0.0	\$0.0	\$0.0	\$58.6	Fund contingent
99387	South Spruce Street Beach Parking	\$165.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99388	Kenai River Mouth South Side Access/Parking	\$828.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99399	Eastern PWS: Human Use/Wildlife Disturbance Model	\$38.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99437	Spruce Bark Beetle Resistant Trees	\$63.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99495	Soldotna Swiftwater Park Access/Restoration	\$252.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99496	Soldotna Centennial Park Access	\$83.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Recreation	n and Tourism	\$687.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
99517	Cultural and Eco-Tourism Center	\$687.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Ecosyster	n Synthesis	\$1,200.9	\$587.8	\$35.0	\$0.0	\$0.0	\$622.8	
99278	Kachemak Bay Ecological Characterization	\$105.2	\$60.0	\$35.0	\$0.0	\$0.0	\$95.0	Fund contingent
99300	Synthesis of Scientific Findings	\$80.3	\$80.3	\$0.0	\$0.0	\$0.0	\$80.3	Fund
99330-BAA	Mass-Balance Model of Trophic Fluxes	\$185.6	\$165.2	\$0.0	\$0.0	\$0.0	\$165.2	Fund cont/defer
99360-BAA	Guidance for Future EVOS Activities	\$194.4	\$194.4			\$0.0	\$194.4	Defer
99362	Environmentally Sensitive Area Maps: Southeast	\$20.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
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			_FY99	Degreet				Total]
Proj. No.	Project Title		Request	FY99	FY00	FY01	FY02	FY99-02	Recommendation
99368	Environmentally Sensitive Areas: Summary Maps	3	\$58.7	\$38.0	\$0.0	\$0.0	\$0.0	\$38.0	Fund contingent
99369	Environmentally Sensitive Areas: Summary/Detail	il Maps	\$165.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99382	Information Transfer Workshop for Managers		\$35.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99394	Environmentally Sensitive Area Maps: PWS		\$116.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
99455	Investigation of Data System for Long-Term Mon	itoring	\$49.9	\$49.9	\$0.0	\$0.0	\$0.0	\$49.9	Defer
99456	Scientific Sampling Protocols for Injury Assessment	ent	\$189.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Withdrawn
Administration, Science Management, and Public Info.		\$498.5	\$498.5	\$0.0	\$0.0	\$0.0	\$498.5		
99350	Alaska SeaLife Center Bench Fees		\$146.5	\$146.5				\$146.5	Fund contingent
99470	10th Anniversary Symposium		\$152.0	\$152.0	\$0.0	\$0.0	\$0.0	\$152.0	Fund contingent
99471	Updating the Status of Services		\$200.0	\$200.0	\$0.0	\$0.0	\$0.0	\$200.0	Fund contingent
Research	Facilities		\$2,256.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
99474	Endowment of UAA Environmental Restoration C	enter	\$2,256.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	Do not fund
Project M	Project Management			\$480.0				\$480.0	
99250	Project Management			\$480.0				\$480.0	Fund contingent
		Total:	\$25,641.7	\$11,191.3	\$2,613.1	\$708.4	\$309.3	\$14,822.1	

Desi Ma		FY99 Request		eliminary Re		<u> </u>	Total	
Proj. No.	Project Title		FY99	FY00	FY01	FY02	FY99-02	Recommendation
Subsiste	ence	\$777.5	\$777.5				\$777.5	
99405	Port Graham Hatchery Reconstruction	\$777.5	\$777.5				\$777.5	Defer
Reduction	on of Marine Pollution	\$1,846.8	\$1,846.8	\$0.0	\$0.0		\$1,846.8	
99304	Kodiak Island Borough Waste Management Plan	\$1,846.8	\$1,846.8	\$0.0	\$0.0		\$1,846.8	Fund contingent
Habitat	Protection	\$756.7	\$756.7		··		\$756.7	1
99126	Habitat Protection/Acquisition Support	\$756.7	\$756.7	_			\$756.7	Fund contingent
Adminis	tration, Science Management, and Public Info.	\$2,500.0	\$2,493.3		<u> </u>		\$2,493.3	
99100	Admin./Sci. Mgt./Public Info.	\$2,500.0	\$2,493.3				\$2,493.3	Fund
Restora	tion Reserve	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.	0 \$48,000.0	
99424	Restoration Reserve	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.	0 \$48,000.0	Fund
	Tota	1: \$17,881.0	\$17,874.3	\$12,000.0	\$12,000.0	\$12,000.0	553,874.3	
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HOW TO READ SPREADSHEET B

Proposer	The individual, organization, or Trustee agency that submitted the project proposal.
Lead Agency	The Trustee agency (USFS, NOAA, DOI, ADFG, ADEC, or ADNR) to which the project has been assigned for project management purposes.
New or Cont'd	Whether or not the project is the continuation of a project funded by the Trustee Council in FY 98. Also, what year FY 99 is in the Council's funding of the project, followed by the total number of years Council funding is expected to be sought (e.g., 3rd year of a 5-year project).
FY 99 Request	The amount of funding requested by the project proposer for federal fiscal year 1999 (October 1, 1998 - September 30, 1999).
FY 99 Recom.	The Executive Director's preliminary recommendation of the amount of funding that should be approved for the project for FY 99.
FY 00 Recom.	For multi-year projects, the estimated project cost for FY 2000, based on the Executive Director's preliminary recommendation for FY 99.
FY 01 Recom.	For multi-year projects, the estimated project cost for FY 2001, based on the Executive Director's preliminary recommendation for FY 99.
Total FY 99-02	Sum of the estimated project cost for all years, beginning in FY 99 and ending with FY 2002 or the project's completion, whichever is sooner.
Abstract	A brief summary of the project.
Chief Scientist	The Chief Scientist's preliminary recommendation on the project's technical merit.
Exec. Director	The Executive Director's preliminary recommendation on project funding for FY 99.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Pink Salmon	1				\$1,893.6	\$654.8	\$297.3	\$46.0	\$1,003.1
99139A2	Port Dick Creek Tributary Restoration and Development	W. Bucher/ADFG	ADFG	Cont'd 4th yr. 6 yr. proj	\$85.8 ect	\$85.8	\$47.0	\$10.0	\$147.8

Project Abstract

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This project will restore the native Port Dick Creek salmon stocks which were exposed to moderate to heavy oiling. Actual restoration of the spawning habitat took place in June 1996. Natural colonization rates were adequate to fully seed the newly restored spawning habitat. Water temperature, water level, salinity, and stream velocity will be monitored as these parameters are well correlated in the literature with spawning success and egg-to-fry survival. Additional sedimentologic parameters (bedload transport, accumulated sediments, and gravel/cobble transport rates) will also be analyzed. These activities as well as evaluation studies will be conducted annually from FY 96 to FY 2000, with possible extension of minor monitoring through FY 02 for streambed stability research.

Chief Scientist's Recommendation

This is a solid example of a practical fisheries restoration and enhancement project. It has successfully created salmon habitat which had previously been destroyed. The basic observations of geomorphology and hydrology, and particularly the stability of the streambed, is something that has not been well addressed in the scientific literature on salmon restoration. Also, the partioning of effects between fresh and marine survival helps determine the effectiveness of stream restoration. The additional season of monitoring is appropriate. However, I encourage the investigators to include in their FY 99 work preparation and submission of a manuscript to a peer reviewed journal. Fund.

Executive Director's Preliminary Recommendation Fund. This project will continue to evaluate the effects of improvements on Port Dick Creek, which are designed to increase available spawning habitat and thus provide additional pink and chum salmon for harvest as a replacement for salmon lost in the oil spill. In the spring of 1997, the first year the number of fry produced by the project was measured, field staff enumerated a combined total of 324,889 pink and chum fry from the creek, which resulted in an estimated egg-to-fry survival rate of 42%. In FY 99, monitoring of spawning success, and monitoring of streambed stability to ensure optimal spawning habitat over the long term, will continue in order to evaluate project success. Also in FY 99, the principal investigator is encouraged to prepare and submit a manuscript to a peer reviewed journal.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99188-CLO	Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon In Prince William Sound	T. Joyce/ADFG	ADFG	Cont'd 5th yr. 5 yr. pro	\$119.9 oject	\$118.8	\$0.0	\$0.0	\$118.8
for develops technology returning to pink salmor hatcheries withrough 198 determine to determine to During pink approximate fishery open Generated managers with period. In pasample size	Project Abstract closes out the Trustee Council's support ment of otolith mass marking as a for identification of hatchery pink salmon Prince William Sound. The otoliths of all reared at Prince William Sound were thermally marked in the fall from 1995 88. Blind tests were conducted to he ability of otolith readers to successfully he origin of randomly selected otoliths. salmon commercial fisheries, ely 100 otoliths were processed from each ning to estimate stock composition. estimates were provided to fishery within 36 hours of the closure of a fishing post-season analysis, a Bayesian dynamic e allocation scheme was invoked to ampling efficiency.	Chief Scientist's Recommend This study has carefully docum and applied a new tool for mans salmon fisheries and hatchery a William Sound on a scale never attempted. Fund.	ented, devel aging mixed activities in F	stock	Executive Dir Fund closeout and review of has supported of otolith mark hatchery pink Sound. The ir which is a more technology that allows fisherie location of the wild stocks of	of this proj a slightly re the develo ing as a tec salmon retu formation pre accurate an its prede s managers commercia	ect conting educed bud opment and chnology fourning to Provided by and less encessor codes to vary that harvest to	ent on sub get. This implemer r identifications Willia r otolith ma xpensive led wire ta e timing al	omittal project ntation ation of am arking, ngs, nd

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99190	Construction of a Linkage Map for the Pink Salmon Genome	F. Allendorf/Univ. Montana	ADFG	Cont'd 4th yr. 5 yr. projec	\$187.3	\$187.3	\$187.3	\$0.0	\$374.6

Project Abstract

This project will complete a genetic linkage map for pink salmon in FY 98. In FY 99, experiments will be continued at the Alaska SeaLife Center that use the linkage map to test for organismal effects of molecular markers on phenotypes that are likely to affect fitness in pink salmon (e.g., survival, growth, and disease resistance). These studies will aid recovery efforts with pink salmon, including estimation of straying rates, description of stock structure, and testing if marine survival has a genetic basis. The tests for natural selection on molecular markers have broad significance for the use of molecular genetic markers to estimate gene flow in pink salmon and other marine species.

Chief Scientist's Recommendation

This is a scientifically sophisticated project by a talented principal investigator that was the subject of a special review session in FY 98. This continuing project now appears to be giving more emphasis to the objective of demonstrating the extent to which allozymes are under natural selection. This is an extraordinarily challenging objective due to the difficulty of carrying out unambiguous experiments. The contribution of such work toward restoration goals seems a lower priority than the other objectives of the project. The project should focus upon quantitative traits of adaptive significance (e.g., run timing, temperature tolerance) that will have direct applications to enhancing management of fisheries in Alaska. Fund contingent on submittal of a revised proposal focusing on traits of adaptive significance.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of a revised Detailed Project Description and budget that focus on the quantitative traits of adaptive significance and their applications to fisheries management. This project, which is being conducted in part at the Alaska SeaLife Center, is designed to improve understanding of genetic variation in pink salmon and how such variation relates to marine survival, run timing, size, and other traits that are important from the standpoint of salmon restoration, management, and harvest. [NOTE: Funds for Alaska SeaLife Center bench fees (approximately \$16,400) need to be added to this project.]

Lead

Now or

FY99

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99191A-CLO	Field Examination of Oil-Related Embryo Mortalities in Pink Salmon Populations in Prince William Sound	M. Willette/ADFG	ADFG	Cont'd 8th yr. 8yr. proje	\$58.9 ect	\$58.4	\$0.0	\$0.0	\$58.4
	Project Abstract	Chief Scientist's Recommer	ndation		Executive Dir	ector's Pre	liminary Re	commend	lation

Elevated embryo mortalities were detected in populations of pink salmon inhabiting oiled streams following the oil spill. These increased rates of mortality persisted annually through the 1993 field season, suggesting that genetic damage may have occurred as a result of exposure to oil during early developmental life-stages. The consequences of this putative genetic damage include physiological dysfunction of individuals and reduced reproductive capacity of populations. The 1994, 1995, and 1996 field results show no statistical difference in embryo mortality between oil-contaminated and reference streams. The purpose of this project is to monitor the recovery of pink salmon embryos in the field. This is the final close-out year for the project.

This is an excellent project, which is needed for completion of damage assessment studies on early life stages of salmon. Although the authors recently published a paper on their earlier data, the results of the most recent years of work should be described in the Detailed Project Description. Fund contingent on submittal of revised proposal that includes analysis of egg mortality through 1997.

Fund closeout (final data analysis and report writing) of this project contingent on submittal of (a) a revised Detailed Project Description that includes the analysis of egg mortality through 1997, (b) a slightly reduced budget, and (c) overdue report (97166). This project represents the major monitoring effort for the ongoing injury to and recovery of pink salmon. The final report will summarize results from ten years of monitoring embryo mortality rates in oiled and nonoiled streams.

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Genetic Structure of Prince William 99196-CLO Sound Pink Salmon

Project Abstract

Previous work found that wild-stock pink salmon suffered direct lethal and sublethal injuries as a result of the oil spill. An understanding of the population structure of pink salmon in Prince William Sound is essential to assess the impact of these injuries on a population basis and to devise and implement management strategies for sustained conservation. Results to date from this study suggest gene flow between pink salmon spawning aggregates can be restricted both spatially (regional and upstream-tidal) and temporally (early-late) within the sound. This proposal covers the final year of laboratory analysis and the statistical analysis of year-three allozyme and mtDNA data.

C. Habicht/ADFG

ADFG Cont'd 6th yr. \$50.0

\$48.2

\$0.0

\$0.0

\$48.2

6 yr. project

Chief Scientist's Recommendation

This project has produced a picture of variability in pink salmon genetics that lays the groundwork for work on gene flow and its future management applications. The activities proposed for FY 99 to close out this project are reasonable. Fund.

Executive Director's Preliminary Recommendation Fund closeout (final data analysis and report writing) of this project contingent on submittal of overdue report (97196) and slightly reduced budget. This project is determining the degree and extent of geographic differences among pink salmon in Prince William Sound based on genetics. Knowing if there are one or multiple stocks among pink salmon in the sound will enable fisheries managers to refine management units and practices to better protect injured wild stocks.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99329-CLO	Synthesis of the Toxicological Impacts on Pink Salmon	S. Rice/NOAA	NOAA	Cont'd 2nd yr. 2 yr. proje	\$52.5 ct	\$51.3	\$0.0	\$0.0	\$51.3
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Project Abstract

This project will synthesize results of all Trustee Council sponsored studies related to the toxicological damage to pink salmon. Since 1989, five separate Council-sponsored projects have individually advanced understanding of the effects of the oil spill on pink salmon: past and present potential for oil exposure (Project /194), effects on egg/embryo survival (Project /191A&B), juvenile feeding and growth (Project FS4B), marine survival and straying of returning adults (Project /076). Data from these studies will be drawn upon in order to construct synthetic conclusions regarding the injury to and subsequent recovery of pink salmon. The results of contracted studies by Exxon Corporation will be compared with the Trustee Council studies.

Chief Scientist's Recommendation

This project will provide a valuable contribution to the efforts to synthesize Natural Resource Damage Assessment work. Fund contingent upon receipt of manuscript titles, proposed journals for submission, and conceptual outlines of papers as described in milestones for FY 98. Executive Director's Preliminary Recommendation
Fund contingent on submittal of (a) manuscript titles, proposed journals for submission, and conceptual outlines of papers as described in milestones for FY 98, (b) late reports (FS1, 97195, 97196) and (c) a slightly reduced budget. In FY 99, this project will complete the synthesis of five separate studies funded by the Trustee Council (FS4B, /076, /191A, /191B, /194) to examine the possible long-term damage to pink salmon of the toxic effects of crude oil. The synthesis will consider additional studies sponsored by Exxon Corporation. Products will be a monograph for publication in a peer reviewed journal and a presentation at the 10th Anniversary Symposium.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99365	Determining the Extent and Magnitude of Straying of Hatchery-Released Pink Salmon in Prince William Sound	T. Joyce/ADFG	ADFG	New 1st yr. 3 yr. proje	\$147.6 ct	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project will estimate the magnitude and extent of straying for the odd-year class of hatchery-released pink salmon in Prince William Sound. Otoliths will be sampled from pink salmon carcasses in randomly selected streams located within each of the major fishing districts. Otoliths of hatchery origin will be identified by specific thermal marks applied to fry at the four Prince William Sound pink salmon hatcheries in the fall of 1997. The proportion of Prince William Sound escapements comprised of spawning hatchery pink salmon will be estimated by area, stream zone (tidal vs. upstream) and for the sound as a whole. The study will be repeated in FY 00 to evaluate straying for the even-year class.

Chief Scientist's Recommendation

This project addresses the long-standing issue of straying of hatchery reared fish. However, this project does not address the most important aspect of this issue, which is the reproductive success of strayed fish and their effect on the fitness of wild fish populations. As proposed, this study does not address EVOS restoration objectives or extend earlier work on injury to early life stages (Project /191A), nor does it appear to have significant management value. I encourage the Alaska Department of Fish and Game to independently synthesize and independently publish previously existing information on straying rates in Prince William Sound (i.e., prior data on hatchery fish with coded-wire tags and otolith marks that were recovered in Prince William Sound streams). Do not fund.

Executive Director's Preliminary Recommendation Do not fund based on technical review. This expensive proposal, which would estimate the extent of straying among hatchery-released pink salmon in Prince William Sound, has little link to the restoration objectives established by the Trustee Council. However, the Alaska Department of Fish and Game is encouraged to independently synthesize and publish existing information on straying of hatchery fish with coded-wire tags and otolith marks that were recovered in Prince William Sound streams.

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EVOO

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99366	Improved Salmon Escapement Enumeration Using Remote Video and Time-Lapse Recording Technology	E. Otis/ADFG	ADFG	New 1st yr. 3 yr. proj	\$60.0 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommendati	on		Executive Dir	rector's Pre	liminary Re	commend	dation

Salmon resources and services within the spill area, and particularly within Prince William Sound, were injured by the oil spill and have not fully recovered. To monitor the recovery of salmon stocks in the spill area and improve escapement information used to set spawning escapement goals, this project will develop remote video and time-lapse recording technology for enumerating salmon escapement. Remote video has the potential to provide accurate, archivable documentation of salmon escapements well beyond the capacity of aerial survey indices, and well below the cost of weir and sonar projects. Videotapes can be retrieved and reviewed weekly to facilitate in-season management of commercial fisheries.

The goal of this project, which is to improve the accuracy of estimates of spawner abundance as a management tool, is worthy. However, the proposal lacks a design that includes an independent check on video counts with another method. Such data should be available through direct counting at the weir where this work is proposed. The proposal also would be more cost effective if the Alaska Department of Fish and Game were to continue to support the operation of the weir and request from the Trustee Council only support of the video-based portion of the work. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund based on technical review. This project
would establish new techniques for estimating
spawner abundance that could potentially advance
salmon management. However, the proposal lacks
important measures of effectiveness.

EVAA

EVOO

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99367	Synthesis and Publication of Fisheries Research	J. Seeb, et al/ADFG	ADFG	New 1st yr. 4 yr. projec	\$53.2 et	\$20.0			\$20.0

Project Abstract

The American Fisheries Society (AFS) has agreed to work with the Alaska Department of Fish and Game to synthesize, edit, and publish the legacy of research conducted on fisheries resources in the Gulf of Alaska spill zone. Many EVOS reports written by Alaska Department of Fish and Game staff provide key information on injured resources. However, some do not form stand-alone publications, and some contain information suitable for more than one article or are too bulky for publication in their current form. Additional synthesis and editing are needed to move these from report status to publication in the peer-reviewed literature. In this project, American Fisheries Society editorial staff will work with Alaska Department of Fish and Game staff to synthesize research reports into manuscripts that will then undergo peer review for consideration in the leading fisheries journals in North America.

Chief Scientist's Recommendation
It is important to publish the results of earlier
EVOS studies conducted by the Alaska
Department of Fish and Game that document
straying of tagged hatchery-produced fry into
Prince William Sound pink salmon streams. I
would support such an effort with the inclusion of
the principal investigators who performed the
earlier studies. Fund contingent on review of
revised proposal focused on producing two to
three manuscripts on pink salmon straying with
appropriately reduced budget.

Executive Director's Preliminary Recommendation
Fund FY 99 only contingent on submittal and review
of a revised Detailed Project Description and budget
that focus on preparation of two to three manuscripts
on pink salmon straying. The Detailed Project
Description should list manuscript titles, authors,
expected journals, and expected dates of
submission. Publication of EVOS work is a priority of
the Trustee Council, but the proposal as written is
vague and expensive.

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EVO4

Total

99443-BAA

Salmon Fisheries Market Share and Market Value Recovery Program

Project Abstract

This project will develop a long-term marketing program designed to enhance the value and market share of commercially harvested salmon that were adversely impacted by the oil spill.

C. Shaw, R. Kopchak/Cordova District Fishermen United

NOAA New 1st yr. \$691.9

EVOG

Mouror

EVOO

\$0.0

\$0.0

\$0.0

\$0.0

3 yr. project

Chief Scientist's Recommendation
Fishing interests in Prince William Sound are experiencing difficult times economically and, initially at least, in some way the oil spill contributed to this situation. The Restoration Plan makes clear that the primary means of restoring lost services is through restoration of the resource itself. I continue to believe that the most appropriate and valuable use of EVOS funds is to foster the long-term health of salmon habitat and sustainable fisheries.

Executive Director's Preliminary Recommendation
Do not fund. This project, which would develop and
fund a program to enhance the value and market
share of commercially harvested salmon, is not
related to the restoration objectives adopted by the
Trustee Council and appears to be legally
impermissible under the terms of the settlement
agreement. The project's aim is to restore the market
for Alaska salmon, rather than restoring the salmon
resource as the Restoration Plan requires. The
issues raised by the proposal are being addressed
under the private plaintiffs' claims against Exxon
Corporation.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99476	Effects of Oiled Incubation Substrate on Pink Salmon Reproduction	R. Heintz/NOAA	NOAA	New 1st yr. 3 yr. projec	\$74.1 et	\$85.0	\$63.0	\$36.0	\$184.0

Project Abstract

This project will examine the effects of oil exposure during embryonic development on the gamete viability of pink salmon that survive to spawn. The objective is to determine if exposure to oil during incubation could explain the reduced gamete viability reported for pink salmon in Prince William Sound under Project /191A. In that study, gametes taken from pink salmon returning to oiled streams had higher mortality rates than gametes taken from salmon in unoiled streams. These data suggest a dramatic effect of oil on vertebrate reproduction that has not previously been described. The plausibility of reduced gamete viability is indicated by the effects demonstrated by Project /191B, which include reduced marine survival and growth of returning adults. However, this effect still requires unequivocal demonstration. This study is designed to make the demonstration and complete a model of life cycle impacts from incubating eggs in oiled gravel.

Chief Scientist's Recommendation

Although previous attempts to investigate this critical issue have been only partially successful, I support this project because of the importance of testing the effects of oil under controlled laboratory conditions to understand possible damages to pink salmon. However, it is essential that the principal investigator obtain further assistance in fish reproductive biology to ensure high reproductive success in untreated control group fish. Alternative exposure methods. including use of exposures in the field, should also be investigated thoroughly. The proposal demonstrates excellent cost-sharing. Fund contingent on incorporation of additional expertise.

Executive Director's Preliminary Recommendation Fund contingent on submittal of a revised Detailed Project Description and budget that include the participation of an expert in the reproductive biology of fish. This project will validate the effects of oil contamination on pink salmon, thus contributing to our understanding of the injury to and recovery status of this injured species.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99489	Crude Oil Exposure Effects on Salmon Smolts	S. Ebbesson/UAF	ADFG	New 1st yr. 4 yr. projed	\$105.8 ct	\$0.0	\$0.0	\$0.0	\$0.0
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Project Abstract

Crude oil exposure has previously been shown to alter thyroid hormone levels differently in fish. depending on the species and developmental stage. This project will determine to what extent exposure to crude oil affects neural and endocrine systems during and after smoltification. The normal changes in these systems are vital for survival in the sea and return to natal stream. These studies will provide information regarding the impact, if any, of crude oil exposure on salmon during this critical period of development, which may explain survival and return-rate problems following the oil spill.

Chief Scientist's Recommendation

This study proposes to examine the effects of crude oil on brain development and smoltification in salmon. The investigators are well qualified neuroendocrinologists. However, the ecotoxicological relevance of the approach is not well established in the proposal. In particular, dosages are not justified and it is not evident that the literature of oil toxicology has been integrated into this proposal. Thus, there is limited applicability to the EVOS restoration program. Do not fund.

Executive Director's Preliminary Recommendation Do not fund based on technical review. This project has little relation to the restoration objectives adopted by the Trustee Council.

EVOO

99491-BAA

Effects of Natural Oil Seeps on Pink Salmon Incubation Success and Condition

Project Abstract

Two principle differences of opinion exist about the effects oil had on incubating pink salmon embryos in Prince William Sound streams. Significant progress can be made toward understanding the effects of oil on pink salmon by examining incubating and adult pink salmon in streams that have a history of exposure to oil from natural oil seeps. Research examining the effects of natural oil seeps on pink salmon is designed to assess its effect on egg viability, embryo survival, and molecular aberrations under conditions of persistent exposure of previous generations. It is anticipated that this study will serve to help in understanding the immediate and long-term effects of oil on pink salmon subject to oil spills.

E. Brannon/Univ. Idaho

NOAA New 1st vr. \$206.6

\$0.0

FVOÒ

Manage

\$0.0

\$0.0

\$0.0

Total

1 yr. project

Chief Scientist's Recommendation

This well written proposal demonstrates a good understanding of the problem. However, studying salmon in western Alaska that may be evolutionarily adapted to oil exposure under different exposure regimes will not necessarily provide data relevant to the crude oil exposures that occurred during the oil spill. There are also questions about the feasibility of the project as proposed, including how the PAH doses will be determined. Restoration objectives will be better served by examining the results of laboratory exposures or hatchery experiments simulating natural stream environments. Do not fund

Executive Director's Preliminary Recommendation Do not fund based on technical review. This proposal, which would study streams on the Alaska Peninsula with natural oil seeps, would not provide data relevant to the crude oil exposures that pink salmon embryos faced during the oil spill.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Pacific Her	ring				\$1,678.1	\$704.9	\$0.0	\$0.0	\$704.9
99162A	Investigation of Disease Factors Affecting Declines of Pacific Herring Populations: Manuscripts/Conference Attendance (Part A)	R. Kocan/Univ. Washington	ADFG	Cont'd 5th yr. 5 yr. pro	\$58.6 pject	\$58.6	\$0.0	\$0.0	\$58.6
dealing w Trustee C additional 1) surviva in sea wa herring, 3 herring fo age-relate laboratory the effect presence demonstr	Project Abstract ect will prepare at least five manuscripts with the research activities funded by the Council under Project /162. At least five I subjects are covered by the existing data: al of viral hemorrhagic septicemia (VHS) virus eter, 2) the natural history of VHS in wild b) serologic conversion and immunity in wild ellowing an epizootic of VHS, and 4) ed immunity demonstrated in ey-reared herring. Additional publications on of net pens on VHS transmission and the of VHS-RNA in wild herring tissues as eated by PCR are anticipated, depending on FY 98 studies.	Chief Scientist's Recommenda In many instances, research res multiyear project are not properl This has been an excellent proje principal investigators have very achievement in EVOS studies. important implications for herring and it should be published. This accomplish that end. Fund.	ults gathere y synthesize ect and the good recor This materia managem	ed. ds of al has ent	Executive Di Fund. This pr (final data and has investigat exposure and disease and ti William Sound of five manus disease trans	oject, which alysis and property of the pote disease in the herring party for the herring party for the herring party so the herrings based	h is closing reparation on tial link be herring, an copulation of ding will pr	out in FY of a final r tween oil d betweer decline in I oduce a n	98 eport), rince ninimum
99162B	Investigations of Disease Factors Affecting Declines of Pacific Herring Populations: Manuscripts/Conference Attendance (Part B)	J. Kennedy/Simon Fraser Univ.	ADFG	Cont'd 5th yr. 5 yr. pro	\$13.4 Dject	\$13.4	\$0.0	\$0.0	\$13.4

Project Abstract

This project will publish and present manuscripts of the results of Project /162 as they relate to effects of environmental contamination and disease on herring fitness. The effects of viral hemorrhagic septicemia virus (VHS), *Ichthyophonus hoferi*, and hydrocarbon exposure were examined to determine their role in population declines experienced by Pacific herring populations in Prince William Sound in 1993 and 1994. Both adult and juvenile herring were used to determine the effects of biochemistry, immunocompetence, performance and reproduction.

Chief Scientist's Recommendation

In many instances, research results gathered in a multiyear project are not properly synthesized and this proposal will accomplish that goal for the several years of work on herring disease. This has been an excellent project and the principal investigators have excellent track records in EVOS studies. This material has important implications for herring management and it should be published so it can be widely available. Fund.

Executive Director's Preliminary Recommendation Fund. This project, which is closing out in FY 98 (final data analysis and preparation of a final report), has investigated the potential link between oil exposure and disease in herring, and between disease and the herring population decline in Prince William Sound. FY 99 funding will produce four manuscripts based on study results related to the effect of oil on herring swimming physiology.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99311	Pacific Herring Productivity Dependencies in the Prince William Sound Ecosystem Determined with Natural Stable Isotope Tracers	T. Kline/PWSSC	ADFG	Cont'd 2nd yr. 2 yr. proj	\$104.5 ect	\$90.0	\$0.0	\$0.0	\$90.0

Project Abstract

The advective regime connecting the northern Gulf of Alaska with Prince William Sound may affect recruitment and nutritional processes in Pacific herring. The Sound Ecosystem Assessment (Project \320) has shown that herring have significant dependence on Gulf of Alaska carbon. Herring are subject to changes in carbon flow occurring between the Gulf of Alaska and Prince William Sound. The first step in understanding how this fundamental environmental process affects herring recruitment is to isotopically analyze a time series of herring for which energetic data have been collected. This will expand upon the data series available from SEA, providing a total four-year time period.

Chief Scientist's Recommendation

This is the second year of a two-year project that has the possibility of showing the contribution of productivity in the Gulf of Alaska to productivity in Prince William Sound. Information linking the two systems is critical to interpreting how nutrients and carbon from the Alaska Coastal Current may be imported and incorporated in Prince William Sound organisms. This information will be important to long-term management of Prince William Sound fisheries. The cost of the project has increased, in part due to the necessary inclusion of Spring 1995 archived samples. However, most of the project costs are for salary, travel, and overhead, and the ten months of staff time for which support is requested seems high. Fund contingent on a revised and reduced budaet.

Executive Director's Preliminary Recommendation
Fund contingent on submission of a reduced budget
and further justification of costs. The target of
\$90,000 is a modest increase over the estimated
cost of \$80,600 and reflects the cost of analysis of
additional samples. FY 99 will be the final year of
this two-year project and will include preparation of a
final report. This project examines the link between
productivity in the Gulf of Alaska and productivity in
Prince William Sound and could benefit management
of fisheries in Prince William Sound.

Proj.No.	Project Title	Proposer	Lead Agency	New o Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99328	Synthesis of the Toxicological and Epidemiological Impacts of the Oil Spill on Pacific Herring	M. Carls/NOAA	NOAA	New 1st yr. 1 yr. p	\$79.3 roject	\$35.0	\$0.0	\$0.0	\$35.0
epidemiole ecological Trustee-spinvestigate exposure and cytogrimmunosu population concluded eggs, and monograp	Project Abstract ct will synthesize results of toxicological and ogical damage to Pacific herring (but not the research still in progress), and compare consored conclusions to those of Exxonors. EVOS researchers concluded that to oil caused egg mortality, morphological enetic abnormalities, reduced growth, and appression in adults, but that effects on the a level were unknown. Exxon investigators I that the spill had a minor impact on herring that the population did not decrease. A of for publication will be prepared and at the 10th Anniversary Symposium.	Chief Scientist's Recomm Synthesis of toxicological a damage to Pacific herring we valuable. However, the pro- proposed cannot be justified work. A budget of \$35,000 sto to prepare the synthesis may contingent on a reduced but	nd epidemiologic rould be quite ject budget as d by the scope of should be satisfa anuscript. Fund	of actory	Executive Dir Fund continge (approximately FY 99 Invitation of herring toxic presentation of Symposium are	nt on subm / \$35,000). n's reques cological ar f results at	nission of a This project t for propose nd disease the 10th A	reduced be ct respond sals for syr studies an nniversary	oudget Is to the othesis
99375	Effect of Herring Egg Distribution and Ecology on Year-Class Strength and Adult Distribution	E. Brown, B. Norcross/UAF	ADFG	New 1st yr. 2 yr. p		\$50.0		\$0.0	\$50.0
egg distrik	Project Abstract ct will examine the effect of Pacific herring oution and abundance as well as aphic processes on year-class strength and	Chief Scientist's Recomm This project would analyze data on herring egg distribu compare them to oceanogr	20 years of histo	y and	Executive Dir Fund continge Project Descri 99, the project	nt on subm ption and a	nission of a reduced b	revised Doudget. In	etailed

This project would analyze 20 years of historical data on herring egg distribution and ecology and compare them to oceanographic factors in Prince William Sound. This project has high potential, but there is need to better understand the reliability and variability of the historical data and the strengths of the relationships to the physical data. In addition, the proposal lacks a detailed hypothesis to be tested. I recommend funding this project in two steps: First, the principal investigators should complete a preliminary analysis of the herring and physical data sets in Year 1 and then develop more rigorous, explicit mechanistic hypotheses for proposed Year 2 work. Fund contingent on a revised proposal

Executive Director's Preliminary Recommendation
Fund contingent on submission of a revised Detailed
Project Description and a reduced budget. In FY
99, the project should focus on completing a
preliminary analysis of the herring and physical data
sets and developing more rigorous, explicit
mechanistic hypotheses for the proposed second
year of work. This project has the potential to relate
herring egg distribution and ecology to
oceanographic factors in Prince William Sound and
thereby contribute to improved fisheries
management.

with a substantially reduced Year 1 budget.

unpublished fishery data.

adult distribution. Existing data will be used in the

dynamics of herring in Prince William Sound. This

information will facilitate area-specific targeting of

catches and provide scientific documentation of

analysis. The findings of this study will aid in

understanding stock structure and population

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99376	Distribution and Ecology of Forage Fish and Effects on Herring Year-Class Strength	E. Brown, B. Norcross/UAF	ADFG	New 1st yr. 4 yr. pro	\$153.6 ject	\$0.0	\$0.0	\$0.0	\$0.0
This proje	Project Abstract ct will improve our understanding of trends	Chief Scientist's Recommend This proposal reflects our grow		nding	Executive Di				lation

This project will improve our understanding of trends in abundance of juvenile Pacific herring, sandlance, capelin, and eulachon. Several project objectives are included: (1) framing the distribution of fish in an oceanographic context, (2) examining how juvenile herring abundance and distribution affects year-class strength and adult distribution, and (3) continued collection of field data needed for analysis of longer-term trends. This project is cost effective since it builds on existing data. Geostatistical analyses and general additive models will be used to report significant findings. A long-term monitoring scheme is proposed.

This proposal reflects our growing understanding of the ecological importance of forage fish, and the value of improving our knowledge regarding the abundance and distribution of juvenile herring. Unfortunately, the proposal's objectives are too broad, which contributes to hypotheses that could be stronger and more focused. This proposal must be refined prior to implementation on this scale, which should be possible over the next few years as recent studies of forage fishes are completed and published and the nature of the potential EVOS long-term monitoring program

is clarified. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. The Chief Scientist has raised
significant concerns about the scientific design of this
project. The Trustee Council may consider funding a
refined proposal after completion and publication of
ongoing studies on forage fishes.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99378	Improving Population Models for Herring Management Along the Northern Gulf of Alaska	W. Donaldson, M. Willette/ADFG	ADFG	New 1st yr. 3 yr. pro	\$384.3 oject	\$232.8			\$232.8
ecosyster stocks spand Prince the spill-ir Alaska. To project bid stocks receptoliting spawning tools for (mixed-stocks and (3) es will be apprinced.	Project Abstract rring is a key species in the marine maffected by the oil spill. Three herring awning at Kodiak Island, Kamishak Bay, e William Sound are currently recognized in mpacted area along the northern Gulf of the age-structured analysis models used to omass and set harvest levels for these quire estimates of catch at age in all fisheries a stock, gear selectivity, weight at age, and biomass. This project will develop better 1) identifying discrete stocks of herring in ock fisheries, (2) projecting weight at age, stimating spawning biomass. Project results plied by managers to improve the population sed to set harvest levels.	Chief Scientist's Recommendati This project would attempt to devertechniques for identifying the origin herring in spawning aggregations spill area (including Kodiak Island by using chemical analyses of scale as well as patterns of scale growth of fish from geographically separated identified within adult aggregations types of data could greatly benefit of the fishery on these mixed stock objectives relate to application of a catch data to stock-prediction mode aerial and acoustic surveys for stock This proposal responds, at least in need identified in the FY 99 Invitation project is still under review, but the interest in moving forward with the objectives. Defer.	elop new in of Pacific throughou and Cook ales and of in. If group te areas of its of the managen ks. Other age-struct dels, as welck assessing part, to a sign. This are is possible.	at the Inlet) toliths bings can be ese enent ell as sment.	Executive Dir Defer decision submittal of a that eliminates surveys). This the FY 99 Invitaddress herrin	pending furevised Det Objective project wat tation, whice	orther discu tailed Proje 3 (aerial ar as submitte h invited p	ission and ect Descrip nd/or acou d in respo roposals t	otion estic ense to hat

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99411	Juvenile Herring and Walleye Pollock Overwintering During an El Nino Event	K. Stokesbury, A.J. Paul/UAF	ADFG	New 1st yr. 3 yr. pr	\$199.6	\$0.0	\$0.0	\$0.0	\$0.0
that marine strength of by physica the juvenile to be critica 1998 El Nii pollock premetabolic raurvival. Trelative aband feeding	Project Abstract ents are sources of thermal perturbations e organisms must adapt to. Year class herring and pollock are strongly influenced and biological conditions occurring during e phase; overwintering conditions appear al. This project's hypothesis is that the no event could bring about herring and ey availability fluctuations and shifts in rates, thus altering nutritional status and This hypothesis will be tested by comparing undance, distribution, whole body energy, g ecology of juvenile herring and pollock in eas before, during, and after the El Nino	Chief Scientist's Recommendation While this proposal has significant academic merit and is likely to detect El Nino effects, what this will contribute to our understanding of the variability of year-class strength in herring and pollock is unclear. While preliminary data suggest that overwintering survival is important for herring recruitment, this proposal is unlikely to elucidate mechanisms that will improve our ability to predict year-class strength, except perhaps in the extreme conditions of an El Nino year. The proposal also contains inadequate evidence of coordination with Project 99436/Oceanography of Prince William Sound Bays and Fjords. Do not fund.					how the re	sults of this	
99438-BAA	Post-El Nino Changes in the Pacific Herring and Walleye Pollock Biomass in Prince William Sound	G. Thomas, J. Kirsch/PWSSC	NOAA	New 1st yr. 2 yr. pr	\$211.8 roject	\$0.0	\$0.0	\$0.0	\$0.0
prespawnia refuges in assessmen 1997. Esti will be prov Atmosphen Fish and G work with t	Project Abstract of will conduct post-El Nino surveys of any herring and pollock in their winter FY 99. These surveys will aid the ant of recruitment anomalies that occur after imates of herring and pollock abundances wided to the National Oceanic and ric Administration, Alaska Department of Same, and local fish processors. We will these management agencies to evaluate occurring to the populations since El Nino.	Chief Scientist's Recommendary This project is worth considering context of a monitoring program dimensions of the potential long-research and monitoring program known, this proposal is premature prespawning surveys of pollock herring are, or certainly are clossagency management function.	in the broa , but, since -term EVOS m are not ye re. Also, and Pacific e to, a norm	the S et nal	Executive Dir Do not fund. That the potent monitoring pro	This project ial long-ter	appears to m EVOS re	be prema	ature in

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99462	Effect of Disease on Pacific Herring Population Recovery in Prince William	G. Marty/Univ. of California Davis	ADFG	New 1st yr.	\$75.1	\$75.1			\$75.1
	Sound			3 yr. pro	ject				
	Project Abstract	Chief Scientist's Recommendat	<u>ion</u>		Executive Di	rector's Pre	liminary Re	ecommen	dation
	ic herring population of Prince William	Recovery objectives for Pacific he	_		Fund FY 99 o				

The Pacific herring population of Prince William Sound has not recovered from severe population decline in 1993. Viral hemorrhagic septicemia virus and the fungus *Ichthyophonus hoferi* were identified as the two main diseases during a multi-year research project that is in its final year in FY 98(Project /162). Prevalence of *Ichthyophonus* decreased after 1995, but an unexpected increase in the prevalence of viral hemorrhagic septicemia virus in 1997 might delay recovery. To determine if disease continues to impair recovery, and to document recovery when it occurs, this project will monitor prevalence of the two major diseases in Pacific herring in Prince William Sound twice annually, from October 1998 through April 2001.

been achieved, and there is evidence that disease occurrence continues at significant levels. This project, which is proposed to be carried out in conjunction with other work proposed to the National Science Foundation (not confirmed), would help define the role of disease in regulating populations of a pelagic marine fish. This work has important implications for management of this keystone species. The work is cost effective and the principal investigator is excellent. Fund, but only for a single year. Second and third year efforts should be, in part, dependent on cost-sharing by the National Science Foundation. Also, any subsequent request must clearly justify additional field work.

Executive Director's Preliminary Recommendation
Fund FY 99 only; consider funding in future years if
National Science Foundation funding (approximately
\$522,000) is forthcoming for further work on herring
disease and population modeling. By monitoring the
health of the herring population for a three-year
period, this project will help determine whether the
herring population in Prince William Sound fully
recovers from the effects of the spill. However, the
value of the project for restoration purposes would be
greatly increased with the component for which
National Science Foundation funding has been
requested.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99463	Ecological Significance of Juvenile Herring Diseases and Their Effect on Subsequent Spawner Recruitment in Prince William Sound and Southeast Alaska	R. Kocan/Univ. of Washington, J. Winton/USGS-BRD	ADFG	New 1st yr. 2 yr. pro	\$94.1 ject	\$0.0	\$0.0	\$0.0	\$0.0
juvenile he affect spatch evaluated antibodies and corresupply, he recruitment be compacted to resulting it	Project Abstract ect will examine morbidity and mortality in erring as population-limiting factors which ewer recruitment. Disease factors will be by culturing tissues, examining plasma is, identifying pathogen nucleic acids by PCR lating changes over time with low food eavy predatory activity and ultimately, eavy predatory activity and ultimately, ent. Geographically isolated populations will ered to determine whether disease levels are throughout an area or vary by location, thus in different recruitment rates. Ultimately, ered invenile mortality will be correlated with	Chief Scientist's Recommendation This project has great potential, as geographically isolated population determining if pathogen and disease are constant throughout an area colocation, potentially resulting in diffused recruitment rates. While the proposal related to disease measure quite strong, the statistical power detect changes in abundance amount of sandland assessing recruitment of sandland 0-2 by geographic area. Do not fur	s comparises will allow use prevalued or vary by ferences in portion of the studies of the studies e method ce/herring	w sences print the is dy to	Executive Di Do not fund. significant cor project.	The Chief S	cientist ha	s raised	<u>_</u>

future recruitment predictions.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99468-BAA	FEATS: Fundamental Estimations of Acoustic Target Strength	J. Kirsch, G. Thomas/PWSSC	NOAA	New 1st yr. 2 yr. projec	\$213.5 ct	\$150.0	\$0.0	\$0.0	\$150.0

Project Abstract

To scale acoustic survey data from relative units (dB) to absolute units (kg/m3), knowledge of the individual fish's target strength (TS) is required. This project will conduct experiments to measure the TS of several dominant fish species in Prince William Sound. FY 99 will concentrate on the development of experimental apparatus, experimental logistics and the application of these to measure Pacific herring TS. If desired, a second year of research may be added which will apply these procedures to other species: walleye pollock, capelin, and sandlance. TS-to-length regressions will be calculated and applied to past surveys in Prince William Sound to obtain more accurate density and biomass estimates, and will serve future acoustic survey efforts of these species in coastal Alaska.

This proposal responds directly to a need identified in the FY 99 Invitation: Obtaining /320) and APEX (Project /163). The science obtaining acoustic target strengths for Pacific

Chief Scientist's Recommendation

better definitions of target strength for forage fish is essential to completion of work on SEA (Project proposed here is appropriate and strong. While herring and sand lance are priorities, the cost of this proposal is too high and some of the requested staff is not justified. I recommend funding, but the project needs to address only two species, herring and sand lance, in a single year at a reduced cost. Fund contingent on receipt of a revised proposal and reduced budget.

Executive Director's Preliminary Recommendation Fund contingent on submittal of (a) a revised Detailed Project Description that focuses on herring and sand lance only and reduces the scope of work to one year only and (b) a reduced budget. This proposal responds to the FY 99 Invitation's request for proposals for research defining the acoustic strengths of different age classes of herring and other schooling forage fishes. It is essential that this work be done as soon as possible because it is essential to final evaluation of the data collected through the APEX project (/163). In general, results of this research will improve the assessment of the biomasses of these fish.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	FY99 Recom.	Recom.	FY01 Recom.	FY99-02
SEA and F	Related Projects		· <u>····</u>		\$2,324.6	\$1,158.0	\$73.6	\$67.2	\$1,298.8
99195	Pristane Monitoring in Mussels	J. Short, P. Harris/NOAA	NOAA	Cont'd 4th yr. 5 yr. proj	\$96.7	\$100.0			\$100.0
	Duning A Abetunet	Chief Ceigntistic Boognesser	dation		Evolutiva E	Nizaataria Des	liminan i D		1_1:

Project Abstract

This project will monitor pristane in mussels through the spring production cycle as an indirect index of predation by juvenile salmon, herring, and nearshore forage fish on *Neocalanus spp.* zooplankton. This index may provide a forecast of poor recruitment for pink salmon or herring caused by poor feeding conditions during the early marine residence portions of their life-cycles.

Chief Scientist's Recommendation

Tracking pristane concentrations in mussels may be a useful tool for monitoring the transfer of energy from copepods to juvenile salmon, and this approach may have a place in a long-term monitoring program. However, the potential of this tool has not been fully established and it is now timely to address the strength of the correlations with salmon production, which can be done through cross-correlations with SEA (Project /320) and hatchery data. I recommend funding this project in FY 99, but the scope of work should be expanded to analyze these correlations. Presumably this will require a slightly increased budget. Fund contingent on receipt of revised proposal and budget.

Executive Director's Preliminary Recommendation
Fund contingent on (a) approval of a revised Detailed
Project Description and budget that expand the FY
99 effort to include analysis of the relationship
between salmon production and the pristane level in
mussels and (b) submittal of FY 97 annual report
(97195). If successful, this project could provide a
relatively inexpensive measure of marine productivity,
thus allowing predictions about future fisheries
production and harvest levels.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99320-CLO	Sound Ecosystem Assessment (SEA)	T. Cooney, et al/UAF	ADFG	Cont'd 6th yr. 6 yr. projed	\$744.4	\$727.1	\$16.1	\$0.0	\$743.2

Project Abstract

This project is an integrated, multi-component study of processes influencing the annual survival of juvenile pink salmon and herring rearing in Prince William Sound. Support in FY 99 provides the means to close out the program. Program closeout includes the submittal of a single, integrated final report and a synthesis volume written as a single journal volume for the journal *Fisheries Oceanography*. Project support will also provide the means for individual principal investigators to address revisions to reports and manuscripts in FY 99. A nominal amount is signaled to the Trustee Council for clean up of revisions and page charges that hang over into FY 00. These tasks will be supervised by an in-house editor and the SEA lead scientist.

Chief Scientist's Recommendation

The science in this project is top quality and the plan for production of journal manuscripts appears feasible. The FY 97 annual report was not available at the time of reviewing this proposal, and there are significant concerns with SEA final products. These include the delay in providing acoustic data, the slow progress of integrating modeling and field measurements, and the need to integrate freshwater input to make the results of the circulation model more realistic. The final documents produced by this project must integrate all of the data collected so that scientists and managers can judge whether or not measuring synoptic properties of the coastal ocean can really improve fisheries management. The synthesis should also reach out to other data sets (e.g., jellyfish predation data from APEX, Project /163) as necessary. I note that \$20,000 in "network/connectivity" costs are included in Project 99431, which is not recommended for funding. I believe that maintaining SEA's computer network in FY 99 is important for principal investigator communication and data sharing and synthesis. The lead investigator, Dr. Cooney, should advise the Executive Director regarding how the computer network will be maintained during closeout. Fund.

Executive Director's Preliminary Recommendation Fund contingent on addressing the concerns raised in the Chief Scientist's recommendation and resolving budget questions. This project will close out the five-year Sound Ecosystem Assessment study, which is formulating interacting numerical models designed to simulate the dynamic processes influencing the survival of juvenile pink salmon and herring rearing in Prince William Sound each year. These models will assist fisheries managers in understanding how environmental factors affect production from year to year, and should enable appropriate levels of harvest to be applied to allow stock response in the face of continually changing natural conditions. In FY 99, a final report and a synthesis volume for the journal Fisheries Oceanography will be prepared. In FY 2000. a small amount of additional funding may be requested to cover costs of final revisions and edits to the final report and manuscript.

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Proj.No.	Project Title	Proposer	Lead Agency	New o		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99320M-CLO	Sound Ecosystem Assessment (SEA): Observational Oceanography in Prince William Sound and the Gulf of Alaska	S. Vaughan/PWSSC	NOAA	Cont'd 6th yr.	\$76.4	\$62.5	\$0.0	\$0.0	\$62.5
Observation completed. model can be the other SE the 97320M proposal is f 97, to cover circulation m	Project Abstract ralidation portion of 97320M/SEA - al Oceanography has not been Model validation is required before the e used for hypothesis testing by any of EA subprojects. Funds were remaining in budget at the end of the year. This for funding, in the amount remaining in FY salaries of personnel responsible for model validation and zooplankton hing hypothesis testing.	Chief Scientist's Recommendat This project is necessary to comp objectives previously requested b Fund.	lete work		Executive Dir Fund continge This project wi by the Trustee The work, which includes validatesting of the z hypothesis.	nt on submil complete Council as the is integration of the	nittal of a re work previous part of SE al to the SE circulation	vised bud ously app A (Project A hypothe model and	get. roved :/320). eses,
99320N-BAA	Acoustic Assessment of Pink Salmon Predators, Macrozooplankton Prey and Juvenile Herring in Prince William Sound	G. Thomas/PWSSC	NOAA	Cont'd 6th yr.	\$74.9	\$52.0	\$0.0	\$0.0	\$52.0
reporting of macrozoopla William Sour projects (/32 which have and analytic of the Juven (/320T). Sol Nekton and been delaye Also, the fur budgeted for project but wasked to sulter wasked to su	Project Abstract will support the processing, analysis and FY 96-97 surveys of salmon predators, ankton prey and juvenile herring in Prince nd. This request is consistent with other nd. Oceanography and /320I, Isotopes) been compensated for additional field al work that occurred with the expansion ille Herring Growth and Habitats project heduled analysis and reporting of the Plankton Acoustics project (/320N) has nd because of this increased work load, nds that are requested were originally or the Nekton and Plankton Acoustics were underspent in FY 96-97. We were omit a new proposal to recapture these equesting a no-cost extension.	Chief Scientist's Recommendat There is concern about the timeta toward integration of acoustics int project (/320) However, this work proper completion of SEA. Fund	ble of progo to the SEA is essent	ial to	Executive Dir Fund FY 99 or budget. This p approved by th (Project /320). hypotheses, in macrozooplan observation da	nly continge roject will c ne Trustee The work, icludes cor kton, salme	ent on subromplete we Council as which is in appletion of	nittal of a rook previous part of SE tegral to the the the the the the the the the the	revised usly EA ne SEA

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99340	Toward Long-Term Oceanographic Monitoring of the Gulf of Alaska Ecosystem	T. Weingartner/UAF	ADFG	Cont'd 2nd yr. 4 yr. proj	\$92.0 ect	\$91.4	\$57.5	\$67.2	\$216.1
	Project Abstract	Chief Scientist's Recommendation	<u>on</u>		Executive Dir	rector's Pre	liminary Re	commend	lation

The 28-year time series of temperature and salinity data from hydrographic station GAK1 near Seward shows substantial interannual and interdecadal variability that could influence the Gulf of Alaska shelf ecosystem. This project will continue this time series and quantify the interannual and interdecadal variability of this shelf. A related goal is to better resolve the time and vertical structure of this variability at periods ranging from the tidal to the interannual. This information will aid in assessing progress in the recovery and restoration of resources and services affected by the oil spill, and will aid in designing a long-term, cost-effective ecosystem monitoring program for this shelf.

Chief Scientist's Recommendation I support the continuation of this project. although it will be important to evaluate how completely the physical oceanographic data being collected will suppport an understanding of all the factors forcing biological production in the Alaska Coastal Current. Despite the fact that the potential EVOS long-term monitoring program is not yet explicitly developed, the continuation of the GAK1 data set is very useful, and the joint development of this data set with GLOBEC is valuable for coordination of their work with the Trustee Council.

Executive Director's Preliminary Recommendation Fund contingent on submittal of a revised budget. This project will continue the existing 28-year time series of conductivity-temperature versus depth (CTD) data collected at hydrographic station GAK1 on the northcentral Gulf of Alaska shelf. The GAK1 data set is useful to our evaluation of changes in the ecosystem (projects SEA/320, APEX/163, and NVP/025) and will be useful to the potential EVOS long-term monitoring program. The GLOBEC program also contributes funding to this project.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99361-BAA	Dynamic Graphical Techniques for Ecosystem Synthesis, Communication and Product Delivery	J. Allen/PWSSC, T. Cooney/UAF	NOAA	New 1st yr. 3 yr. proj	\$95.0 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommendat	ion		Executive Di	rector's Pre	liminary Re	commend	lation

As the tenth anniversary of the oil spill approaches, there is an increasing need for information synthesis, translation, and communication. Transfer of ecosystem-level research results to the public, resource managers, policy makers and the wider scientific community remains a critical challenge. A number of techniques developed within the Sound Ecosystem Assessment (SEA, Project /320) have proven useful in this context. This project will extend selected SEA technologies to support the broader synthesis tasks of the Trustee Council's research program. The proposed work will complement existing synthesis efforts by focusing on graphical approaches, including advanced computer imaging and presentation technology.

In general, this project has the potential to address important synthesis objectives and link multiple elements of the restoration program. The principal investigators are very strong, and the presentation of SEA (Project /320) results at the 1998 Restoration Workshop was an example of how sophisticated scientific information can be conveyed to the public in an exciting fashion. The specific aspects of this proposal, however, are not particularly compelling at this time. Some components seem unnecessary (e.g., providing additional funds for a SEA presentation at the 10th Anniversary Symposium), while other aspects are premature (e.g., extension of SEA techniques to the potential long-term EVOS research and monitoring program, which is not yet defined). Cost is rather high over a three-year period. Do not fund.

Do not fund. The potential for this type of graphical presentation was effectively demonstrated by the proposer at the 1998 Annual Restoration Workshop. However, this project's primary objective in FY 99. development of a presentation on SEA (Project /320) for the 10th Anniversary Symposium, should be funded out of the existing 99320 budget. Some of the other objectives, particularly the application of graphical and web techniques to the Trustee Council's overall synthesis goals, might be reconsidered in future years.

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99393-BAA	Prince William Sound Food Webs: Structure and Change	T. Kline/PWSSC	NOAA	New 1st yr. 4 yr. projec	\$221.7 t	\$125.0			\$125.0

Project Abstract

Recent research has shown that the advective regime connecting the northern Gulf of Alaska with Prince William Sound may affect recruitment and nutritional processes in fishes. Accordingly, food webs are subject to changes in carbon flow occurring between the Gulf of Alaska and Prince William Sound. This project seeks to (1) conduct retrospective analysis of GOA production shifts since the oil spill, (2) address Ecopath model validation data gaps, (3) find evidence of biophysical coupling from the 1997-98 El Nino event, (4) address a benthos data gap, and (5) expand the isotopic database domain in space and time.

Chief Scientist's Recommendation

This project has a variety of objectives involving application of carbon and nitrogen stable isotope ratios to ecological questions. While tracking ratios can provide a unique indication of basic shifts in biological productivity, geophysics, or trophic position, interpretations may be several and only resolvable with additional data. Thus, these measures usually provide the most unambiguous interpretation of ecological processes when they are part of more comprehensive programs. Nonetheless, there are several applications of these tools in the proposal that are worthy of support. The possibility that there may be an isotopic record back to 1989 in bivalve shells from the Gulf of Alaska is worth exploring. Also, confirmation of trophic position of a variety of marine organisms for the purposes of refining the Ecopath model (Project \330) is also worthwhile. Fund objectives 1 and 2 for one year, with the budget reduced accordingly.

Executive Director's Preliminary Recommendation Defer decision pending further review of funding priorities. If funded, funding would be contingent on submittal and review of a revised Detailed Project Description and budget that focus on Objectives 1 (retrospective analysis of Gulf of Alaska production shifts) and 2 (ecopath model validation data gaps) only. This project would use carbon and nitrogen stable isotope ratios to confirm the relative trophic status of species-within the Prince William Sound ecosystem. This information would be useful in validating the food web model being developed under Project /330.

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Total

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New or

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99431-BAA	Prototype Modeling Products: Transition, Alpha Testing, and Benefit-to-Cost Analysis for Products From Project /320	V. Patrick/PWSSC	NOAA	New 1st yr. 1 yr. proje	\$338.8 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

Throughout the implementation of the Restoration Plan, the Trustee Council has expressed the objective of fully developing the findings and technologies of the restoration projects into applications with long term, continuing utility and benefit for the spill-effected region. This project will address that objective. The project identifies a first set of restoration results that in FY 99 will be appropriate for application prototyping and performance trials. A pivotal issue is the benefit-to-cost ratio for any set of the applications. This project will configure a selected set of products for prototyping and target a maximally broad constituency, the goal being economically viable products and support system based on a strong benefit-to-cost ratio.

Chief Scientist's Recommendation

The SEA project (\320) has produced a great deal of information that will benefit users in fisheries management, the fishing industry, port and shipping interests, and others. There is value in thinking carefully about what EVOS information will benefit these groups and how best to foster the necessary transfer of information. However, the modeling products from SEA are still being produced. It is premature to fund further development of models until prototypes are produced and reviewed. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. The concept of this project, which is to develop models for use by non-scientists, has merit but is premature until the modeling products currently being developed under SEA (Project /320) are available and have been reviewed.

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FY99

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	Recom.	Recom.	FY99-02
99435-BAA	Oceanography of Prince William Sound	S. Vaughan/PWSSC	NOAA	New 1st yr. 2 yr. proje	\$208.8 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

Oceanographic measurements in 1994-97 showed that some aspects of the circulation and water mass properties of Prince William Sound are fairly predictable and geostrophic. More variability exists in the months before, during, and after the peak zooplankton bloom. Since zooplankton are a major food source for many species of juvenile fish, the general health of the sound depends on the abundance and availability of zooplankton. The Sound Ecosystem Assessment (Project /320) documented seasonal and some interannual relationships between zooplankton abundance and physical processes, but the effects of longer time scale processes, such as El Nino or regime shifts, were not addressed. To understand plankton variability on interannual and decadal time scales, a time series of physical and biological oceanographic properties needs to be created. This proposal will implement a prototype measurement system in Prince William Sound to relate plankton distribution and abundance to physical processes on longer time scales.

Chief Scientist's Recommendation

The necessary background for this proposal would have been a synthesis of SEA (Project /320) oceanographic data. Absent such a synthesis, the proposed work is not well justified. There also is inadequate detail on exact tasks that will be completed. Costs are very high, and request of six months support for each of three people seems very high relative to workload. The principal investigators are capable in terms of the physical measurements, but I cannot recommend funding at this time. Do not fund.

Executive Director's Preliminary Recommendation

Do not fund based on technical review. The proposal is expensive and lacking in detail.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99436-BAA	Oceanography of Prince William Sound Bays and Fjords: Effects of the 1997-98 El Nino	S. Vaughan/PWSSC	NOAA	New 1st yr. 3 yr. projed	\$103.5	\$0.0	\$0.0	\$0.0	\$0.0
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Project Abstract Strong warm episode El Nino conditions, comparable to the 1982-83 episode, have persisted in the tropical eastern Pacific since 1997. Abnormally warm and dry atmospheric conditions and unusually warm ocean waters are present along the entire southern coast of Alaska. Coupled biological and physical data have been collected for four bays in Prince William Sound since 1995. Water mass properties and currents in these bays have been found to be extremely complex and seasonally variable. Recently, it has been hypothesized that water mass changes associated with the 1997-98 El Nino event could affect zooplankton abundance and juvenile herring metabolic rates, thus altering their nutritional status and survival. This proposal will continue measurements of water mass properties (temperature and salinity), current velocities, zooplankton densities,

and fluorescence in FY 99, FY 00, and FY 01.

Chief Scientist's Recommendation Like the other proposals for investigating El Niño phenomenon, this project is of significant academic interest but its contribution to restoration objectives is unclear. I am concerned in general about the concept of moving forward on new herring studies prior to the synthesis of knowledge from previously funded projects. A single proposal in conjunction with a group of herring scientists that documented specific biological and related parameters would be more compelling. Do not fund.

Executive Director's Preliminary Recommendation Do not fund based on technical review. This project, which would essentially continue Project 98297 (Oceanography of Prince William Sound Bays and Fiords) beyond its closeout year by investigating effects of El Nino, has little link to the Trustee Council's restoration objectives.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99467-BAA	Assessment of the Interannual Variability of Pelagic Production in Prince William Sound	G. Thomas, V. Patrick, K. Osgood/PWSSC	NOAA	New 1st yr. 2 yr. proj	\$272.4 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommendati	on		Executive Di	ector's Pre	liminary Re	commend	lation

The Sound Ecosystem Assessment (Project /320) has developed the first generation of models to predict pink salmon population changes as a result of natural causes so that they can be separated from anthropogenic causes, such as oil spills. The two models developed are a physical-biological model (circulation and plankton) and a nekton model. This project will initiate a program that will systematically measure weather conditions, physical conditions and plankton for input to the physical-biological model, and will measure macrozooplankton and pelagic nekton as input to the nekton model. These data will be collected with remote sensors and on a vessel of opportunity to make the model-based monitoring very cost-effective. These data are essential for the development of second generation models that can be used by management to now-cast population changes of key resources in Prince William Sound.

Chief Scientist's Recommendation
This project proposes to build upon the first generation of models developed under SEA (Project /320) to predict pink salmon population changes, but these models have yet to be produced by SEA. I find it difficult to invest in development of second-generation models until the results of developing first-generation models are available. Do not fund.

Executive Director's Preliminary Recommendation Do not fund based on technical review. This proposal is premature given that the results of the first generation of SEA (Project /320) models are not yet available.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Cutthroat Tro	ut, Dolly Varden, and Other Fish				\$1,262.4	\$258.0	\$0.0	\$0.0	\$258.0
99043B-CLO	Monitoring of Cutthroat Trout and Dolly Varden Habitat Improvement Structures	D. Gillikin/USFS	USFS	Cont'd 6th yr. 6 yr. pr	\$9.5	\$8.0	\$0.0	\$0.0	\$8.0
of data colled habitat improunder Project concerns ratinadvertently thereby increand cutthroat address the previous pro	Project Abstract will prepare the final report and analysis acted from 1995 to 1998. Sixty-three ovement structures were installed in 1995 act 95043B. At that time there were ised that habitat structures may y increase coho salmon populations, easing competitive stress on Dolly Varden at trout populations. The final report will five working null hypotheses presented in apposals to determine if the improvements efit to cutthroat trout and Dolly Varden.	Chief Scientist's Recomme Monitoring the success of the habitat improvements is nece success. Fund this final year	previously insessary to evalu	ate	Executive Di Fund closeour of a reduced it (\$8,000). This effectiveness were installed populations of information with the success of to other situat	t of this project has project has of habitat in FY 95 to cutthroat to this project	ect conting e expected s monitore nprovemen restore an rout and Do es manage	ent on sult amount d the at structure ad enhance olly Varder ement in g	omittal es that e n. This auging
99145-CLO	Cutthroat Trout and Dolly Varden: Relation Among and Within Populations of Anadromous and Resident Forms	G. Reeves/USFS, K. Currens/Northwest Indian Fisheries Commission	USFS	Cont'd 4th yr. 4 yr. pr	\$73.0 oject	\$50.0	\$0.0	\$0.0	\$50.0
	Project Abstract	Chief Scientist's Recomme	ndation		Executive Di	rector's Pre	liminary Re	ecommend	<u>lation</u>

This project is determining the relation between resident and anadromous forms of Dolly Varden and cutthroat trout within the same watershed and between watersheds in Prince William Sound. In FY 99, analysis will continue of genetic, meristic, and life-history features of each group, which were sampled in FY 96 and FY 97. This project received close-out funds in FY 98; this one-year extension is requested because it has taken longer to complete the genetic analysis than originally thought. Results from this study will allow development of a long-term, comprehensive and ecologically sound restoration strategy for these fish.

This work is important to more fully understand development of the injury and recovery status of Dolly Varden and cutthroat trout. The new information gained about the biology of these species will also aid management in Prince William Sound. The investigators need to fully analyze and explore the data relative to possible recent severe population bottlenecks and to fully interpret the lack of congruence between the mtDNA and microsatellite results. I recommend funding of \$50,000 toward the full analysis of genetic data and production of a manuscript suitable for publication.

Fund contingent on submittal of a reduced budget that includes preparation of a manuscript in FY 99. This project is evaluating genetic and other relationships between resident and anadromous forms of cutthroat trout and Dolly Varden in Prince William Sound. Although scheduled to close-out in FY 98, the project has been slowed by the need to develop additional tools for the analysis of mtDNA and microsatellite DNA, and funding in FY 99 is necessary to complete data analysis and prepare a final report. This project will aid understanding of injury to and recovery of these fish species, and has important implications for restoration and management.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99252	Investigations of Genetically Important Conservation Units of Rockfish and Walleye Pollock	J. Seeb, L. Seeb/ADFG	ADFG	Cont'd 2nd yr. 5 yr. proj	\$263.7 ect	\$200.0			\$200.0
	Project Abstract	Chief Scientist's Recommendati	on		Executive Di	rector's Pre	liminary Re	ecommend	dation

This project will consolidate an array of requests from the commercial fisheries industry for discrete stock research into a single proposal for work that the Alaska Department of Fish and Game will conduct at its Anchorage genetics laboratory. Also, the Alaska Department of Fish and Game proposes to develop experimental fish runs at the Alaska SeaLife Center; these are essential for study of genetics, physiology, or diseases of anadromous fish proposed by University of Montana, University of Alaska, or the Alaska Department of Fish and Game and other principal investigators seeking to conduct research at the Seward facility.

This project was funded in FY 98 recognizing that measures of possible genetic differences within fish stocks is an important starting point for a better understanding of population genetics and, eventually, how to best manage the fishery to protect genetic diversity. In the present proposal. it is not clear how "genetic importance" will be determined or how the relationship between "genetic importance" and production, productivity, and population viability will be established. The current scientific literature is not adequately reviewed, and the proposed sample size of 100 individuals may be twice the necessary amount given the results of recent research. Other genetic work on pollock appears to be ongoing in the region, but the potential for collaboration with these other scientists is not explored. Finally, the laboratory work for determining heredity of null alleles is not well justified, and is unlikely to contribute to restoration objectives. A revised proposal addressing these critiques, including appropriate reductions to the budget, should be submitted prior to FY 99 funding being approved. Fund contingent on revised proposal and reduced budget.

Fund contingent on submittal and review of a revised Detailed Project Description and budget that address the Chief Scientist's concerns. This project is just getting underway in FY 98 at the Alaska SeaLife Center, and it will explore genetic stock structures of rockfish and pollock in the Gulf of Alaska. Rockfish were injured by the oil spill, and a pollock fishery has developed in Prince William Sound to replace other lost fishing opportunities. The Chief Scientist has raised a number of technical issues, which must be addressed before this project can be continued. [NOTE: Funds for Alaska SeaLife Center bench fees (approximately \$14,800) need to be added to this project.1

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Proj.No.	Project Title	Proposer	Lead Agency	New o		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99354	Development of Habitat-Based Population Assessment for Nearshore Rockfish Along the Northern Gulf of Alaska	M. Willette/ADFG	ADFG	New 1st yr. 4 yr. p	\$236.5 roject	\$0.0	\$0.0	\$0.0	\$0.0
result of the effort, has rockfish recoalesce apopulation survey, munderwate nearshore collect rocgenetic ar	Project Abstract ng opportunities for salmon and herring as a ne oil spill, coupled with greater recreational is increased exploitation of nearshore resources in recent years. This project will a variety of complementary habitat-specific in assessment methods (transect dive nultiple mark-resighting, hydroacoustics, and ier video stations) for application to re rockfish assemblages. The project will also rescribe tissue samples and live specimens for nalysis under Project /252. Project results and to identify essential habitat for nearshore is.	Chief Scientist's Recommeter This project would employ a approach to assessing rocking present understanding of whom rockfish habitat is limited. The minimal discussion about whom rockfish habitat and of how to investigators propose to mal Basic methods cited are approached and the mathematical representation method has problems. This contribution to rockfish management of the mathematical representation method has problems. This contribution to rockfish management of the mathematical representation method has problems. This contribution to rockfish management of the mathematical representation method has problems. This contribution to rockfish management of the mathematical representation method has problems.	habitat-based fish populations at constitutes he proposal has nat constitutes the principal ke this determinoropriate, but the project could magement, but the agement, but the constitute of the transect project could magement, but the constitute of the transect project could magement, but the constitute of the transect project could magement, but the constitute of the could magement, but the constitute of the could magement, but the constitute of the could make the constitute of the could make the constitute of the could make the constitute of th	nation. e : nake a e	Executive Dir Do not fund. fisheries mana habitat-specifi expensive pro has raised a n	This project agers to ass c rockfish p ject, howev	would imp sess the st opulations er, and the	rove the a atus of . This is a chief Sci	bility of
99383	Distribution Study of Cutthroat Trout and Dolly Varden in Prince William Sound	R. Spangler/USFS	USFS	New 1st yr. 3 yr. pr	\$25.6	\$0.0	\$0.0	\$0.0	\$0.0
distribution particularly such basic spill or imple technique will invest of contain population when com a more co William So	Project Abstract t gaps in knowledge exist regarding the n of cutthroat trout and Dolly Varden, y in western Prince William Sound. Without c information, determining the effect of the plementing prudent management is for recovery is very difficult. This project igate watersheds that have a high likelihood ing these species to further describe the in distributions. The results of this study, inbined with these other findings, will provide complete picture of these species in Prince ound and will greatly assist managers in	Chief Scientist's Recomme This project identifies an impadditional fishing pressure on Dolly Varden in western Prinand proposes a cost-effective populations. However, the significant of the project /145, and should not go forward until the Project /145 are available.	portant issue of on cutthroat troud nce William Sou we assessment of ampling is likely and so this project the final results of	t and nd, of to be	Executive Direction Do not fund. Streams with or Prince William these species evaluated before additional wor	This project cutthroat tro Sound. H in Project \ ore there is	would iden out and Dol owever, the 145 must b	ntify additionally Varden to current work to c	onal in vork on out and

future restoration and conservation efforts.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99408-BAA	Aspects of Salmon Shark Ecology in Alaska Waters	J. Musick, K. Goldman/Virginia Institute of Marine Science	ADFG	New 1st yr.	\$283.3	\$0.0	\$0.0	\$0.0	\$0.0
				3 yr. proj	ect				
	5 1 1 AL 1 1	01: (0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0							

Project Abstract

Salmon sharks are the apex pelagic fish predator in Gulf of Alaska waters and Prince William Sound, yet their ecological role is largely unknown due to lack of information on their biology and life history. In an effort to define the ecological role of salmon sharks, a cooperative program between the Virginia Institute of Marine Science and the Alaska Department of Fish and Game was established in 1997. Results from this study will make a substantial contribution towards better understanding ecosystem function in the Gulf of Alaska and Prince William Sound, and will also foster responsible population management.

Chief Scientist's Recommendation

This is a potentially good study, although there are some questions about the methods, including sample design. The salmon shark is not an EVOS-injured species, although work on this species is of importance in an ecological context. Much of the information required ideally should be obtained as a matter of normal agency management. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This project would study the ecological
role of salmon sharks in the Prince William Sound
ecosystem. Salmon sharks are not on the Trustee
Council's injured resources list. Although they are of
ecological interest and there is need to gather basic
information in relation to growing fishing pressure,
this is an expensive project and gathering basic
information for purposes of population management
is most appropriately a normal agency management
function.

99409

Investigations of Salmon Shark Diet and Predation on Injured Resources in Prince William Sound

Project Abstract

The salmon shark is the predominant large predatory fish species in Prince William Sound. Anecdotal evidence suggests a dramatic increase in salmon shark biomass within the oil spill region in recent years. In areas of high abundance, salmon sharks have the potential to significantly impact a number of spill-injured species in the region. Salmon sharks are known predators of pink salmon, rockfish, and Pacific herring, and are potential predators of marine birds and harbor seals. This study of the spatial and temporal variation in the diets of Prince William Sound salmon sharks will help fill a void in our understanding of the trophic interactions of these sharks with spill injured resources.

A. Brase/NOAA

NOAA New 1st yr. 3 yr. project

\$91.2

\$0.0

\$0.0

\$0.0

\$0.0

Chief Scientist's Recommendation

Although it is true that we do not understand the feeding habits of salmon sharks in Prince William Sound, this proposal would have been more compelling if existing information on this family of sharks was used to develop a quantitative justification for the importance of these species as apex predators. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. This project would study the diets of salmon sharks. The possible effects of predation by salmon sharks on fish and wildlife injured by the oil spill is of potential interest, but the proposal does not sufficiently justify the possible impacts of this predation based on existing information. As with Project 99408, there also is the issue of the degree to which the needed information is a normal agency management function, especially in view of growing fishing pressure on this species.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02	
99425	Description of Rockfish Distribution and Habitat Preference Based on Underwater Video From Prince William Sound and Surrounding Areas	A. Brase/NOAA	NOAA	New 1st yr. 2 yr. pro	\$36.9 oject	\$0.0	\$0.0	\$0.0	\$0.0	
commercial Sound due Submersible damage as resource for and other ecological analyze the data-sheet other demonstrates.	Project Abstract are one of the least understood ally important species in Prince William to to the inaccessibility of their habitat. The videotape exists from a 1989 oil spill to understanding the ecology of rockfish demersal species. The videotape from the ty has never been analyzed for the information it may provide. This project will the archived video tapes and accompanying ts and produce a report on rockfish and the ersal species and their association and of both substrate and epifauna.	Chief Scientist's Recommendation This project is potentially worthwhile because of the information it might provide on rockfish habitats. However, without a preliminary characterization of the content and quality of the videotape, there simply is not sufficient information to judge whether this investment is worthwhile. Do not fund.			Executive Director's Preliminary Recommendation Do not fund. This project would provide for the analysis of previously gathered videotape which could aid understanding of rockfish. While this project could improve understanding of rockfish habitat preferences, which would be useful (see Project 99354), there is need for a preliminary characterization of the content and quality of the videotape. This is an investment that should come from the responsible management agencies.					
99472	Growth Rates of Cutthroat Trout and Dolly Varden in Prince William Sound: Comparison of Populations in Oiled and Unoiled Sites	G. Reeves, D. Markle/USFS	USFS	New 1st yr. 3 yr. pr	\$242.7 oject	\$0.0	\$0.0	\$0.0	\$0.0	
resources originally li the oil spill oiled areas unoiled are of populati comparing	Project Abstract Ien and cutthroat trout are listed as injured whose recovery is unknown. They were isted as injured because studies following I found that growth rates of populations in s were less than those of populations in eas. This project will examine growth rates ions in oiled and unoiled areas by g sites with similar geographic features. Om this study will determine the status of cies.	Chief Scientist's Recomme This project is premature unt completed. Do not fund.		5 is	Executive Dir Do not fund. I work in Project and Dolly Vard obtaining addir proposal is pre out and evalua	This project t \145 on gi den. Althou tional data emature be	would exprowth rates to there mention this sub- this sub-	and the custing in cutthromay be medient, this ject, this	irrent at trout rit in	

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Marine Mamn	nals				\$773.0	\$712.3	\$496.1	\$193.1	\$1,401.5
99012A-BAA	Comprehensive Killer Whale Investigation in Prince William Sound	C. Matkin/North Gulf Oceanic Society	NOAA	Cont'd 7th yr. 9 yr. proje	\$85.4 ect	\$85.4			\$85.4

Project Abstract

This project will continue the monitoring of the damaged AB pod and other Prince William Sound/Kenai Fjords killer whales that has occurred on a yearly basis since 1984. Methods include the photo identification of individual whales and acoustic monitoring with remote and vessel-based hydrophone systems. The project will finalize interpretation and provide for publication of the results of a multi-year examination of killer whale population biology, genetics, acoustics, trophic interactions, spatial and temporal distribution patterns, and contaminant accumulation.

Chief Scientist's Recommendation
This is a good project that has produced consistently high-quality data on killer whales, which continues to be a species of concern. The principal investigator is excellent, and it is hard to imagine a way to carry out this work for less money. Fund contingent on an update on the status of the five manuscripts promised in FY 98.

Executive Director's Preliminary Recommendation Fund contingent on submittal of a status report on the five manuscripts promised in FY 98. This project is providing valuable information about the long-term effects of the oil spill on resident and transient pods of killer whales in Prince William Sound.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99064	Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals in Prince William Sound	K. Frost/ADFG	ADFG	Cont'd 5th yr. 6 yr. proje	,\$264.8 ect	\$264.3	\$130.0	\$0.0	\$394.3

Project Abstract

This project will monitor the status of harbor seals in Prince William Sound and investigate the hypothesis that food limitation to pups and juveniles is causing the ongoing decline. Aerial surveys will be conducted during molting to determine whether the population continues to decline, stabilizes, or increases. Seal pups will be satellite-tagged to describe and compare their movements, hauling out, and diving behavior to older seals and seals in other areas. Deuterium oxide will be used to examine annual variations in the nutritional status of pups and yearlings, as indicated by body fat content. Fatty acids analysis will be conducted on recent and archived blubber samples and mathematical models developed to estimate seal diets and whether they have changed since the 1970s.

Chief Scientist's Recommendation

This continuing project is providing valuable information to assess the recovery of harbor seals. The fatty acid research has begun to elucidate trophic trends, but needs more groundtruthing with laboratory experiments using captive animals (see Project 99371). If juvenile mortality is the key factor influencing recruitment, past experience from other areas suggest it will be difficult to measure directly. Fund.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of a revised
budget that (a) slightly reduces the FY 99 budget to
delete one trip to Anchorage for a technical review
session and (b) reduces estimated costs for FY 00
and FY 01 to those projected in the FY 98 Work
Plan. This project will help explain the long-term
decline in harbor seals in Prince William Sound. The
results of the study will enable resource managers,
subsistence users, and others to focus their efforts
and concern on the most probable causes of harbor
seal population decline.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99341	Harbor Seal Recovery: Controlled Studies of Health and Diet	M. Castellini/UAF	ADFG	Cont'd 2nd yr. 4 yr. proje	\$133.4 ect	\$125.1	\$132.8	\$91.4	\$349.3

Project Abstract

This project will continue a long-term study to quantify the impact of specific fish diets on the health and body condition of harbor seals. The ability to conduct such investigations under controlled conditions is now available at the Alaska SeaLife Center. This project will establish whether specific diets are nutritionally adequate to maintain seal health. Even though health status biomarkers for marine mammals in Prince William Sound were established during field trials (Project /001), the critical test of how each marker varies in an individual as a result of a specific prey item has not been established. While this project will focus on the issue of harbor seal health, the approach is potentially applicable to any of the injured top predators.

Chief Scientist's Recommendation

The principal investigator has carried out a strong program in the field to assess the health status of harbor seals. However, to realize the full benefit of these field studies, they must be complemented by studies on harbor seal health in relation to diet in a controlled setting. This work is essential to the full evaluation of current hypotheses about limitations to the recovery of harbor seals. The proposal could be strengthened by more specific information on experimental design and methods of data analysis. Fund contingent on a revised proposal.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of (a) a
revised Detailed Project Description that amplifies the
experimental design/data analysis methods and (b) a
revised budget for the expected amount of
\$125,100. This project will investigate the health and
diet of harbor seals under controlled conditions at the
Alaska SeaLife Center and enable scientists to test
the validity of results from field studies. [NOTE:
Funds for Alaska SeaLife Center bench fees
(approximately \$56,800) need to be added to this
project.]

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99371	Effects of Harbor Seal Metabolism on Stable Isotope Ratio Tracers	D. Schell/UAF	ADFG	New 1st yr. 3 yr. projec	\$105.9 t	\$105.9	\$101.7	\$101.7	\$309.3

Project Abstract

A major concern with the use of stable isotope tracers in ecosystem studies is the fidelity with which ratios are transferred up food chains. Use of specific habitats or prey cannot be assessed if geographic gradients in isotope ratios are laid on top of trophic effects and/or prey switching. To remove these problems we will seek specific conservative biomarkers such as essential amino acids or fatty acids that carry isotope ratios unmodified by metabolism. Amino acids labeled with 15N and 13C will be used to follow transamination and carbon relocation during metabolic processes in the seals at the Alaska SeaLife Center. Specific fatty acid isolation and determination of suitability as habitat biomarkers will follow in years two and three of the project.

Chief Scientist's Recommendation

This project would provide detailed information at the level of specific amino and fatty acids about isotope effects in trophic transfer and provide insight into which compounds are synthesized and which can be acquired in the diet. The results of this project will improve the trophic tracer methodology. The principal investigator should add additional expertise in biochemistry, metabolism, and nutrition. Fund contingent on receiving a revised proposal that includes this additional expertise.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of a revised
Detailed Project Description and budget that include
the expertise recommended by the Chief Scientist.
The results of this project will enable researchers to
better understand the effects of diet on the recovery
of harbor seals. [NOTE: Funds for Alaska SeaLife
Center bench fees (approximately \$4,000) need to
be added to this project.]

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99441-BAA	Harbor Seal Recovery: Effects of Diet on Lipid Metabolism and Health	R. Davis/Texas A&M Univ.	ADFG	New 1st yr. 2 yr. projec	\$131.6 t	\$131.6	\$131.6	\$0.0	\$263.2

Project Abstract

To better understand the results from field studies of harbor seal health, body condition, and feeding ecology, data are needed on diets that vary in nutritional composition. Working with the Alaska SeaLife Center, this project will determine how fatty acid profiles in the blubber of captive harbor seals change over time during controlled diets of pollock, herring, and several ground fish species. In addition, it will assess the aerobic capacity and lipid metabolism of skeletal muscle in harbor seals fed controlled diets and in wild harbor seals in Prince William Sound. The results will augment already funded investigations of diet and health to provide a more in-depth understanding of the nutritional role and assessment of dietary fat for harbor seals.

Chief Scientist's Recommendation

This is an important project, in that other studies have examined fatty acid signatures of harbor seals in the field, but there is need for controlled studies with animals of known history. This project would use facilities at the Alaska SeaLife Center to address this gap. The principal investigator is very strong. The proposal could have a stronger presentation of details about the sample design, particularly the feeding regime. This is important and timely work. Fund contingent on a revised proposal.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of a revised
Detailed Project Description that amplifies the sample
design, particularly the feeding regime. This project
will study the effects of diet on lipid metabolism and
health in harbor seals. [NOTE: Funds for Alaska
SeaLife Center bench fees (approximately \$6,800)
need to be added to this project.]

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99464

Physiological Condition of Juvenile Harbor Seals: Impacts of Age and Morphology

Project Abstract

This project will characterize the morphological and physiological factors that limit the diving behavior and foraging efficiency of harbor seal pups. The size, body composition, oxygen stores and metabolic rates of healthy wild pups captured within Prince William Sound will be measured, and compared to values determined for animals that enter the Alaska SeaLife Center in need of rehabilitation. These comparisons will allow us to determine when and why harbor seal pups are most vulnerable to ecological disturbances, and to identify factors which have a high probability of impacting successful recruitment. Data collected in this study will be augmented by that collected in Prince William Sound in FY 98, and in California as part of a separate project.

J. Burns/UC Santa Cruz

ADFG New 1st yr.

\$51.9

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\$0.0

4 yr. project

Chief Scientist's Recommendation

While this proposal is of academic interest and presented by a well-qualified proposer, I am not convinced that the project will provide useful data regarding the factors controlling harbor seal populations. Previous research does not suggest that diving capability will be compromised in iuvenile seals. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. The Chief Scientist has raised
significant concerns about the proposed
methodology of this project. Furthermore, it is unclear
how the results of this study would contribute to an
understanding of factors limiting the recovery of
harbor seals.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Nearshore E	cosystem				\$2,637.4	\$1,574.3	\$35.0	\$0.0	\$1,609.3
99025-CLO	Mechanisms of Impact and Potential Recovery of Nearshore Vertebrate Predators (NVP)	L. Holland-Bartels, et al/USGS-BRD	DOI	Cont'd 5th yr. 5 yr. proj	\$706.2 ect	\$500.0	\$0.0	\$0.0	\$500.0

Project Abstract

FY 99 is the close-out year for the Nearshore Vertebrate Predator project. Funds for this year are for data analysis, final report writing, manuscript preparation, poster preparation, and presentation of results at professional meetings. The Nearshore Vertebrate Predator project makes an integrated assessment of trophic, health, and demographic factors across a suite of apex predators injured by the spill to determine mechanisms constraining recovery and to improve knowledge of the status of recovery. Primary hypotheses are: (1) Recovery of nearshore resources injured by EVOS is limited by recruitment processes: (2) Initial and/or residual oil in benthic habitats and in or on benthic prey organisms has had a limiting effect on the recovery of benthic foraging predators; and (3) EVOS-induced changes in populations of benthic prey species have influenced the recovery of benthic foraging predators.

Chief Scientist's Recommendation
Proper closeout of this project, which is
fundamental to evaluation of progress toward
EVOS recovery objectives, is essential. The
project has potential to synthesize important
questions that will be very timely for the 10th
anniversary. The budget increase of \$250,000
over the expected \$450,000 is not well justified in
the proposal. Absent additional justification, I
recommend funding of \$500,000.

Executive Director's Preliminary Recommendation
Fund closeout of this project contingent on budget
reduction. This project will provide funds for data
analysis and report/manuscript writing to close out
the four-year field effort undertaken to determine
whether sea otters, river otters, harlequin ducks, and
pigeon guillemots are recovering from the oil spill and
whether recruitment processes, continuing exposure
to oil, or food availability are limiting recovery. One
way to reduce the budget would be to priority rank
the 61 manuscripts called for in the Detailed Project
Description, and limit the number of manuscripts
prepared in FY 99; the Trustee Council may consider
funding additional manuscripts in FY 2000.

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Proj.No.	Project Title	Proposer	Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99090	Monitoring of Oiled Mussel Beds in Prince William Sound	P. Harris, C. Brodersen/NOAA	NOAA	New 1st yr. 2 yr. projed	\$180.0 ct	\$150.0	\$35.0	\$0.0	\$185.0

Project Abstract

This project will monitor mussel densities and hydrocarbon concentrations in mussels and sediments in 28 mussel beds in Prince William Sound. Twelve of these beds were restored in 1994; mussel hydrocarbon concentrations decreased significantly and replaced sediments remained clean through 1995. 1996 samples, however, indicated recontamination of the replaced sediments and the potential for recontamination of mussels in some restored beds. To compare the efficacy of restoration efforts to long-term natural recovery, we propose to monitor an additional 16 beds that were untreated and remained oiled when they were last sampled (1995). To complete the design, two unoiled reference beds will also be re-sampled.

Chief Scientist's Recommendation
In 1994, the Trustee Council funded a project to experimentally clean several oiled mussel beds. These beds were last visited in 1995, and it is now timely to revisit them to assess concentrations of remaining oil and also the integrity of the mussel beds themselves. In order to evaluate a restoration technique, this work needs to be done. The cost of the proposed work is too high and needs to be reduced. Fund contingent on submittal of final report (Project 95090) and draft manuscripts (Project 97090), as previously funded, and a reduced budget.

Executive Director's Preliminary Recommendation Fund contingent on submittal of (a) the Project 95090 final report, (b) drafts of the manuscripts funded under Project 97090, and (c) a reduced budget for both FY 99 and FY 2000. This project, which was called for in the FY 99 Invitation, will evaluate an experimental restoration technique used to clean mussel beds in FY 94. Twelve beds restored in 1994 and sixteen untreated beds that remained oiled when last sampled in 1995 will be surveyed.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99223-BAA	Evaluation of Sea Otter Population Structure, Population Condition, and Habitat Use in Prince William Sound and Adjacent Areas	L. Rotterman/Enhydra Research	NOAA	New 1st yr. 2 yr. proj	\$87.8 ject	\$0.0	\$0.0	\$0.0	\$0.0
population s specific sur distribution of sea otter areas. Find evaluate pa assessmen establish be status relati response; (assessmen recovery; (§ activities or	Project Abstract It will provide information about the structure, movements, age- and sex- vival, habitat use, rehabilitation, and abundance, and carcass persistence is in Prince William Sound and adjacent dings from this project will be used to (1) ast, current and future monitoring and at study techniques and design; (2) enchmarks against which to gauge current ive to recovery; (3) formulate future spill 4) interpret monitoring and damage at results and modeling of sea otter b) evaluate the impacts of restoration a sea otter recovery; and (6) elucidate (e.g., immigration or emigration) impacting	Chief Scientist's Recommendat This project would analyze valual have the potential to make a cont restoration objectives. However, i proposers were funded to write for papers and should focus their effor completing that previous project (fund.	DIE data the ribution to n FY 97 th ur scientifi orts on	e i c c r o not p	Executive Di Do not fund. Project could runderstanding otters. Howeveroposer's Proposel may our manuscripeer reviewed	The manus make a value of the injuryer, the manuer of the	cripts proportion of the contribution of the c	osed under bution to overy of se anded und progress. 2000 ond e complet	er this cour ea er this This ce the

the course of recovery.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99289-BAA	Status of Black Oystercatchers in Prince William Sound	S. Murphy/ABR, Inc.	NOAA	Cont'd 2nd yr.	\$232.6	\$232.6	\$0.0	\$0.0	\$232.6
population Sound nine spill. Year summer 19 monitoring 98. Becau effort are c proposal profeffort that examine pe	Project Abstract will assess the status of the breeding of black oystercatchers in Prince William e (1998) and ten (1999) years after the oil 1 studies for this project are scheduled for 98, but preliminary results from that initial effort will not be available until later in FY se the extent and focus of the Year 2 ontingent upon the findings of Year 1, this rimarily represents an estimate of the level at will be required to more thoroughly ersistent impacts to the breeding of oystercatchers in Prince William Sound.	Chief Scientist's Recomm Defer pending evaluation of results from current work of (Project 98289).	f at least prelimin	•	Executive Did Defer decision project was fur assess the injustry with the scope the results of work is deemed proposer and proposer and proposal 9948 submit Detailed further work. Calls for result earlier date with scheduled Design of the proposal submit Detailed further work.	n pending re inded in FY iury status of e of possible the injury as ed necessa the propose 30 will be pred Project D The 98289 ts to be writ ould better	eview of FN 98 as a or of the black of future wo ssessment by following or of the coovided the descriptions of Detailed Ften up in Jasuit the Trusten State of Free Process of P	' 98 effort. e-year effice-year effice-year effice-year effice-year efficiency the review opportunity for specification opportunity after the specification opportunity specif	This ort to cher, ent on mal w, this ty to fic scription 99; an ncil's

Hydrocarbon Data Analysis, 99290 Interpretation, and Database Maintenance

Project Abstract

This project is a continuation of the Natural Resource Damage Assessment and restoration database management, sample storage, and interpretive service. New data will continue to be incorporated into the Trustee Council hydrocarbon database. Updated summary reports for investigators and managers will be produced along with an electronic copy of the data for all data queries. A database for pristane sample collection and analysis information will be maintained and a database will be initialed for fatty acid/lipid class composition sample collection and analysis for Auke Bay Lab projects funded by the Trustee Council.

J. Short, B. Nelson/NOAA

NOAA Cont'd 8th yr.

\$58.9

deferred projects.

\$58.9

\$58.9

11 yr. project

Chief Scientist's Recommendation

This ongoing project proposes to expand the database to include pristane monitoring data and fatty acid analyses. I recommend the project be funded provided (1) all fatty acid data developed in Trustee Council projects be included in the data archive, (2) a recommendation be developed during FY 99 for the Chief Scientist regarding the long-term management (including potential disposal) of the environmental samples in the archive, and (3) a brief review be provided to the Chief Scientist prior to the end of FY 98 regarding the expected workload for this project in the future. Fund contingent on addressing the above issues.

Executive Director's Preliminary Recommendation Fund contingent on satisfactory response to the concerns raised by the Chief Scientist. In FY 99, maintenance of a pristane data base (relative to Project /195) and initiation of a fatty acid/lipid data base will be added objectives. In addition, a recommendation should be developed during FY 99 regarding the long-term management (including potential disposal) of the environmental samples in the archive. In FY 2000 and beyond, the level of funding will be determined following a review of the expected workload in future years. This project is the ongoing analysis and interpretation of hydrocarbon data for other Trustee Council funded studies

6/10/98

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99325-BAA	Assessment of Injury to Intertidal and Nearshore Subtidal Communities Following EVOS: Preparation of Manuscripts for Publication	T. Dean/Coastal Resources Associates, Inc.	NOAA	Cont'd 2nd yr. 2 yr. pro	\$44.0 oject	\$40.9	\$0.0	\$0.0	\$40.9
scientific jou funded eval	Project Abstract twill prepare manuscripts for publication in urnals based on previous Trustee Council luations of injury to, and restoration of, itats (intertidal and subtidal communities).	Chief Scientist's Recommendat Considering the severe impact of intertidal communities and the tre investment in intertidal studies du damage assessment and early ye restoration program, it is highly de essential that these results get pu peer reviewed literature. These p investigators are excellent and un produce what they propose. Fund	EVOS on mendous ring the ears of the esirable an blished in rincipal doubtedly	the	Executive Dir Fund continge budget and (b) 1998). This pr manuscripts in previously fund CH1, /086C, // manuscripts w and although of peer reviewed being made or	nt on subm) 95086C re roject will pu i FY 99 on ided by the 106, and other ras funded in only one hauliterature, i	ittal of (a) seport (Stekerepare two results of in Trustee Cohers). Prepin FY 98 (Ps been subreasonable	slightly recoll, due Ju additional atertidal struction of paration of roject 983 pmitted to	luced ne 15, udies jects f six (25), the
99348	Responses of River Otters to Oil Contamination: A Controlled Study of Biological Stress Markers	M. Ben-David, T. Bowyer, L. Duffy/UAF	ADFG	Cont'd 2nd yr. 2 yr. pro	\$222.9 oject	\$207.1	\$0.0	\$0.0	\$207.1
contaminati responses i captive otte contaminati Samples of	Project Abstract will explore the effects of oil on on physiological and behavioral n river otters experimentally. Fifteen rs will be exposed to two levels of oil on under controlled conditions in captivity. blood, tissues, and feces will be collected of biomarkers and immunological ns.	Chief Scientist's Recommendat This is the second year of a two-y experimentally determine the biod physiological responses of river o contamination. This project is nee determine if measurements of pot in field-captured animals are cons exposure. Fund.	ear project themical a tters to oil eded in ord ential mar	nd der to kers oil	Executive Dir Fund continge reduced budge Alaska SeaLife contamination understanding this injured spe SeaLife Cente need to be add	nt on submet. This prose Center to on river ott of the injurecies. [NO r bench fee	ittal and re pject is usin validate thers, thus conducted to and re TE: Funds ses (approximation)	view of a g facilities e effects c ontributing covery sta for Alaska	at the of oil to our atus of

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99379	Assessment of Risk to Residual Oil in Prince William Sound Using P450 Activity in Fishes	S. Jewett/UAF	ADFG	New 1st yr. 1 yr. pro	\$121.3 oject	\$121.3	\$0.0	\$0.0	\$121.3
in fishes as of exposure likely route used as a s to fishes as risk of exponearshore final pacific sand habitat preferences.	Project Abstract will measure cytochrome P-4501A activity an index of the spatial extent of the risk to hydrocarbons and as an index of the of exposure. Masked greenling will be urrogate to determine the spatial extent, well as other nearshore vertebrates, of sure to hydrocarbons. Three common ishes (masked greenling, Pacific cod, and I lance) that have different prey and erences will be used as indicators of foil exposure.	Chief Scientist's Recomme This project would provide me the induction of oil-sensitive of nearshore fishes in the oiled William Sound. Preliminary s indicate induction in the kelp years after the spill, and this extend this information to two to a wider area in FY 99. De similar proposal (Project /432 together in relation to the Tru objectives for documenting th response by fishes in western Sound.	ore information anzymes in areas of Prince studies in 1997 greenling eight proposal would o other species fer until this and can be consistee Council's nis possible oil	e I and d a dered	Executive Dil Defer decision additional P-4: contingent on budget. This fishes mask lance as ind	pending fu 501A work. submittal a project wou ed greenlin	orther consi If funded, nd review of Id use thre g, Pacific o	ideration of funding word a reduce the nearshoth cod, and se	f ill be ed re and
99402-BAA	Weathered Oil Effects on Sediment Microorganisms	R. Ewing/Biotech, Inc.	NOAA	New 1st yr. 3 yr. pro	\$106.4 oject	\$0.0	\$0.0	\$0.0	\$0.0
of microorga weathered of areas with s Biomass an series of mi measureme analysis of l content, AT measureme measureme correlated w	Project Abstract will examine the biomass and composition anisms in beach sediments polluted with bil and compare these results with control similar sediments but with no residual oil. It does not be a crobiological, biochemical and chemical ents, including most probable number bacteria, oxygen consumption, chlorophyll P determinations, adenylate charge ents, and electron transport system ents of sediments. Analyses will be with the amount of oil present, water en substrate type, and season.	Chief Scientist's Recomme This proposal would assess recomposition, and biological a concentration of oil in beach a Although the principal investing qualified, this proposal does account prior microbial studies. Trustee Council, nor does it comportant restoration objective.	microbial bioma activity in relatio sediments. gator is well not take into es funded by the contribute to an	e y	Executive Direction Do not fund ba proposal has I restoration obj	ased on tec ittle link to t	hnical revie	ew. This	

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EVOO

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99423	Pattern and Processes of Population Change in Selected Nearshore Vertebrate Predators	J. Bodkin & D. Esler/USGS-BRD, D. Rosenberg/ADFG	DOI	New 1st yr. 4 yr. proj	\$477.0 ect	\$60.0			\$60.0
	Designat Abatract	Chief Calantietta Becommendet	lion		Evenutive Di	rootoria Dro	liminanı De	ocommond	lation

Project Abstract

Prior research has identified sensitive variables for assessing recovery of the nearshore ecosystem in western Prince William Sound through populations of sea otters, their invertebrate prey and harlequin ducks. Core data collection includes annual surveys of sea otter distribution and abundance, estimates of abundance and size classes of key sea otter prey, and annual assessment of harlequin duck numbers, population structure, and survival. Additional, but independent, components are proposed to expand the spatial scale of P450 sampling of sea otters and to examine adult sea otter female survival. movements, and foraging energetics. This project will monitor both injured populations and ecological processes to address questions central to recovery of the nearshore ecosystem and will test new approaches to ecosystem monitoring.

Chief Scientist's Recommendation

This work is an important extension of Nearshore Vertebrate Predator (Project /025) work on two prominent, still-injured species -- sea otters and harlequin ducks. Work on these species could be part of a long-term monitoring program, but apart from that possibility, some continued work, at least for sea otters, can be justified on the basis of assessing their recovery status. Continuing work on harlequin ducks may be needed after Project /025 is completed and the status of this species is reviewed. The principal investigators are strong, and this proposal embodies good interagency cooperation. However, the annual cost of this work is very high and I have concerns about underwriting an extensive program in advance of the completion of Project /025 or the possible establishment of a long-term monitoring program. I recommend funding only aerial surveys of sea otters in order to track possible progress toward recovery in the Knight Island archipelago.

Executive Director's Preliminary Recommendation
Fund contingent on approval of a revised Detailed
Project Description and budget that reduce the
project's scope to aerial surveys of sea otters in FY
99 only; defer decision on surveys of green sea
urchins as an indicator of recovery of sea otters
pending further review. Additional work on sea otters
and harlequin ducks may be considered in FY 2000,
once Project /025 (Nearshore Vertebrate Predator) is
completed and the status of these species is
reviewed.

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EVOO

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Total Recom. FY99-02	
99432	Proximate and Ultimate Effects of Crude Oil on the Intertidal Fish, High Cockscomb	A.J. Paul/UAF	ADFG	New 1st yr. 3 yr. projed	\$66.4	\$66.4		\$66.4	
	Drainet Abatraat	Chief Colontialla Decemberdatio	_	_	ivaantina Die	antonia Dan	المستسمان المستسنا		

Project Abstract

The high cockscomb is an abundant intertidal fish of Prince William Sound that had elevated hepatic P-4501A levels after the oil spill. This study's first objective is to examine possible continued sublethal effects by determining hepatic P-4501A levels in Prince William Sound cockscombs ten years after the spill. Sublethal exposure to oil is often lethal in the long term because it reduces an organism's fitness through altered reproduction. Elevated P-4501A levels in Prince William Sound cockscombs were primarily due to living on oiled sediment. Therefore, the second objective is to determine how living on oiled sediment affects spawning behavior, maternal care of the eggs, and embryonic development.

Chief Scientist's Recommendation

This is an excellent scientific proposal from a well qualified principal investigator. It would provide detailed information on the reproductive biology and oil toxicology of a common intertidal fish in the spill area. Reexamination of P-4501A induction of this species to see if effects seen earlier persist is a worthy goal. A two-stage approach may be appropriate, focused in the first year on particular nearshore areas where oil persists and possibly in a second year, if appropriate, on possible physiological implications of continued P-4501A (CYP1A) induction. Second year investigations would be appropriate if field results showed a link between induction and oil remaining in the environments. Laboratory experiments should be carried out at environmentally appropriate doses. Defer until this and one other similar proposal (Project /379) can be considered together in relation to our objective for documenting this possible oil response by fishes in western Prince William Sound.

Executive Director's Preliminary Recommendation Defer decision pending further consideration of additional P-4501A work. If funded, funding will be contingent on submittal and review of a revised Detailed Project Description and budget which focus in the first year on particular nearshore areas, such as oiled mussel beds, where oil persists and in a second year, if appropriate, on possible physiological implications of continued P-4501A induction. This project would use the high cockscomb to evaluate the effects on intertidal fish of living on oiled sediment. Intertidal fish are an important food for many of the seabirds injured by the oil spill. [NOTE: Funds for Alaska SeaLife Center bench fees (approximately \$2,700) would need to be added to this project.

Lead

New or

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99448	Evaluating Recovery of Coastal River Otters: Gender-Specific Response to the Oil Spill	M. Ben-David, T. Bowyer/UAF	ADFG	New 1st yr. 2 yr. proj	\$90.1 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommends	etion		Executive Dir	rector's Pre	liminary Re	commend	ation

Project Abstract

This project will investigate diets of male and female river otters inhabiting oiled and unoiled areas of Prince William Sound. It will ascertain diet composition using archived fecal samples from immediately post spill to the present, and determine gender classification of the feces by DNA analysis. Direct observations in previous studies suggested that male and female river otters may differ in their foraging strategies, with solitary females concentrating more on sedentary intertidal fish. whereas groups of males rely more on pelagic fish. Therefore, females may have increased susceptibility to disturbance of the intertidal zone leading to significant effects on population recovery.

Chief Scientist's Recommendation

The proposers have a great deal of experience with river otters, and they have put together an interesting proposal. The reviewers, however, had a number of questions about the specific experimental design, such as the apparent lack of linkage between the telemetry work and the analysis of archived scat samples. The Nearshore Vertebrate Predator work (Project \025) on river otters is being completed and there is related work underway at the Alaska Sealife Center (Project \348). Present work needs to be completed and evaluated before considering additional work on river otters. Do not fund.

Do not fund based on technical review. The ongoing work on river otters (projects /025 and /348) should be completed and evaluated before additional work on river offers is considered.

FY00

FY99

Residual Oiling of Armored Beaches 99459 and Mussel Beds in the Gulf of Alaska

Project Abstract

For at least five years after the spill, oil mousse persisted on the exposed rocky shores of the Alaska and Kenai peninsulas in a remarkably unweathered state. This project will resample these boulder-armored beach sites that were last studied in 1994. In addition, the results of previous work will be used to predict, on the basis of geomorphology and oiling history, other locations in the spill area where oil is likely to be persisting in a relatively unweathered state. These sites will then be visited and sampled. In addition, we will resample several oiled mussel beds in the Gulf of Alaska that had relatively high levels of oiling in 1993, to compare residual oiling of these with oiled mussel beds in Prince William Sound.

G. Irvine/USGS-BRD, D. Mann/UAF, J. Short/NOAA

DOL New 1st yr. \$195.5 \$125.0

FY99

\$0.0

FY01

Total

\$125.0

2 vr. project

Chief Scientist's Recommendation

The possible continued presence of oil on what many consider one of the greatest wilderness coasts in the National Park System may represent continuing injury from the oil spill. However, the proposal seems overly elaborate for purposes of documenting continued injury to wilderness. A much less costly proposal to document continued oiling with qualitative techniques would be more compelling. Fund contingent on receipt of a revised proposal and substantially reduced budget.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of revised Detailed Project Description and budget that focus on documenting persisting oil through the use of qualitative techniques. This project will monitor the persistence of oil at sites previously monitored in FY 94 along the coasts of Kenai Fjords and Katmai national parks, which will provide important status information ten years after the spill. However, it is not critical that this work be performed in FY 99. In the Kodiak region, the final round of shoreline monitoring took place in FY 95. In Prince William Sound, shoreline sites cleaned in FY 97 near the community of Chenega Bay will be revisited in FY 98 (Project /291). It may be appropriate to conduct another, more comprehensive round of shoreline monitoring in Prince William Sound in two to three years.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	FY99 Recom.	FY00 Recom.	FY01 Total Recom. FY99-02
99466	Recovery Status of Barrow's Goldeneyes	D. Esler/USGS-BRD	DOI	New 1st yr. 2 yr. projed	\$12.2 ct	\$12.1		\$12.1

Project Abstract

Although Barrow's goldeneyes are not on the list of resources injured by the oil spill, some recently collected evidence suggests that goldeneves may have been injured and populations may not be fully recovered. Due to these concerns, this proposal will critically assess the status of recovery of Barrow's goldeneve populations from the oil spill through assemblage and analysis of all existent, relevant data. This will be accomplished through analyses of data collected for other objectives within the Nearshore Vertebrate Predator project (/025) and compilation of existing information from other sources. This work will lead to the definition of recovery status, identification of any data gaps limiting our understanding of recovery status or impediments to recovery, and, if warranted, proposal of directed research to fill those gaps during FY 2000 and beyond.

Chief Scientist's Recommendation

The Barrow's goldeneye is not considered an injured species, although the Nearshore Vertebrate Predator project has found fresh evidence of injury to this species. The Trustee Council will reconsider its status, but the work proposed here is probably more substantial than is needed to provide such information. This work might be most appropriate as a follow up to a decision on the Barrow's goldeneye injury status, and might provide a basis for identifying subsequent restoration and research priorities. Defer.

Executive Director's Preliminary Recommendation
Defer decision until the Trustee Council has
reconsidered the status of injury to the Barrow's
goldeneye, expected Winter 1998. This species is
currently not on the Trustee Council's injured
resources list, but the Nearshore Vertebrate Predator
project (/025) has found new evidence of injury.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99480	Abundance and Reproductive Success of Black Oystercatchers in Prince William Sound	B. Andres/USFWS	DOI	New 1st yr. 1 yr. pro	\$36.1 oject		\$0.0	\$0.0	\$0.0
by the oil unknown. Knight, G breeding information information invertebrate of these follected oystercate Island in Green Island in productive.	Project Abstract c oystercatcher was determined to be injured spill and the status of its recovery is. This project will survey shorelines on treen, and Montague islands to determine pair occupancy and productivity. This on will be compared with data gathered from 993 along the same shorelines. Additional on will be collected on predator densities and atte prey densities to determine the influence factors on occupancy and productivity. Data in 1999 will demonstrate recovery of black others if (1) more pairs are occupying Knight 1999 than in 1993, (2) the population on and is increasing or stable, and (3) ity is similar, when accounting for predation and food availability, between Green and ands.	Chief Scientist's Recommer Defer pending evaluation of a results from current work on b (Project 98289).	t least prelimin	tchers	Executive Dir Defer pending was funded in the injury statu additional work review, this pro competing pro opportunity to specific further Description ca January 1999; Trustee Counc decision meeti	review of F FY 98 as a is of the bla k is deemed oposer and posal 9928 submit Det r work. The lls for result an earlier of	Project 982 I one-year of ack oysterod necessar I the proposes will be projected 98289 Dotte to be writed become	89 results, effort to as atcher. If y following ser of the covided the ct Descripetailed Protten up in better suiber 1998	, which ssess g the e tions for oject

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Seabird/Fo	rage Fish and Related Projects				\$3,423.3	\$2,611.1	\$1,254.5	\$95.1	\$3,960.7
99144A	Common Murre Population Monitoring	D. Roseneau/USFWS	DOI	Cont'd 4th yr. 4 yr. proj	\$72.6 ect	\$72.6	\$72.6	\$0.0	\$145.2

Project Abstract

This project will recensus the Barren Islands murre colonies in FY 99. The recensus had been scheduled for FY 00 or FY 01. However, returning 3-, 4-, 5-, and 6-year-old birds from the strong 1993-96 chick cohorts will provide an excellent opportunity to determine whether population increases documented in FY 97 are continuing, and if they are, to obtain the information needed to satisfy the remaining recovery goal for this injured species in the spill area (a potential finding appropriate for the 10th anniversary of the spill).

Chief Scientist's Recommendation

Common murres experienced significant mortality at the time of the oil spill, and the Trustee Council has funded a series of studies that have closely monitored the Barren Island colonies to document their recovery status. Previously, the plan had been to conclude Barren Island censuses in FY 97 and to census the Chiswells in FY 98. However, there now is concern about the effects of the current observed mortality of murres in the Gulf of Alaska, especially at a time when young murres born since 1993 (when productivity returned to normal) should now be returning to the colony and being recruited into the breeding population. This is an important time in the recovery of this species, and continued monitoring at the Barren Islands is necessary. Fund.

Executive Director's Preliminary Recommendation
Fund. Murres were severely injured by the oil spill, and this project extends population monitoring of the Barren Islands colonies. Productivity first returned to normal at the Barren Islands in 1993, and there now is concern about the effects of a murre die-off at a time when the young produced since 1993 should be recruited into the breeding population. Thus, this project is important to follow through on the entire sequence of post-spill injury and recovery.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	Recom.	FY99-02
99159	Surveys to Monitor Marine Bird Abundance in Prince William Sound During Winter and Summer: Report and Publication Writing	B. Lance, D. Irons/USFWS	DOI Cont'd \$37.0 \$37.0 6th yr. 9 yr. project						\$37.0
birds in Pr March 199 July 1989, project wil determinin changed a zone. It w for Prince	Surveys to Monitor Marine Bird B. Lance, D. Irons/USFWS Abundance in Prince William Sound During Winter and Summer: Report		et, and reporeys being veys are the covery status esults of this of the 10th	ji e S s of a S E E ii	Executive Difference ournal the presentation of the presentation of the presentation of the presentation with the presentation of the presentation with the presentation with the presentation with the presentation of the presen	ent on submedicular eviously propect will ys for maring Sound. The are the princoastal birds	nittal to a permised mare report on the birds and nese surve nary means de and other	eer-review nuscript (P ne results d mammai ys are imp s of monito er wildlife.	red roject of FY ls in portant oring an This

99163 APEX: Alaska Predator Ecosystem
Experiment in Prince William Sound
and the Gulf of Alaska

Project Abstract

This project uses seabirds as probes of the trophic (foraging) environment of Prince William Sound and compare their reproductive and foraging biologies, including diet, with similar measurements from Cook Inlet, an area with apparently a more suitable food environment. These measurements will be compared with hydroacoustic, aerial, and net sampling of fish to calibrate seabird performance with fish distribution and abundance. This will allow a determination of the extent to which food limits the recovery of seabirds from the oil spill. Historical data from a variety of sources will be used to detect shifts in forage fish abundance and to test hypotheses explaining such shifts.

D. Duffy/Paumanok Solutions

NOAA Cont'd 6th yr. \$1,986.1 \$1,986.1

\$900.1

\$0.0 \$2,886.2

7 yr. project

Chief Scientist's Recommendation

This project is producing important results that can have immediate application to management and restoration of injured species. This project was recently the subject of a detailed scientific review. Key technical issues raised in the review include (1) adequate groundtruthing of aerial surveys and (2) refocusing the acoustic program on the key issues of multi-species assessment and herring target strength determination. Delays in supplying properly scaled hydroacoustic estimates of fish abundance are a major concern for principal investigators in making their conclusions about fish-bird relationships. These issues should be addressed in FY 99. Fund.

Executive Director's Preliminary Recommendation Fund. The APEX project is investigating the regulation of seabird populations in relation to the availability and quality of forage fish, such as herring and sand lance. This ecosystem-scale project has important implications for the recovery of several seabird species injured by the oil spill, and it already has yielded insights about long-term changes in the Gulf of Alaska ecosystem. The project leadership has made good use of adaptive management in FY 98, although there continue to be some technical concerns, particularly in regard to the analysis and application of hydroacoustic data on fish abundance. The APEX project leaders also must plan now for the orderly closeout of this work in FY 00, not in FY 01 as is indicated by some of the subproject principal investigators.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99169	A Genetic Study to Aid in Restoration of Murres, Guillemots, and Murrelets in the Gulf of Alaska	V. Friesen/Queen's Univ., J. Piatt/USGS-BRD	DOI	Cont'd 3rd yr. 4 yr. proj	\$92.7 ect	\$86.2	\$13.8	\$0.0	\$100.0
	Project Abstract	Chief Scientist's Recommend	lation		Executive Di	rector's Pre	liminary Re	commend	lation

Populations of common murres, pigeon guillemots, and marbled and Kittlitz's murrelets suffered high mortalities following the spill. This project will continue the analyses of mitochondrial DNA, microsatellites, and introns to measure genetic differentiation and gene flow among colonies of these species. This project will aid restoration by (1) determining the geographic limits of populations affected by the spill. (2) identifying sources and sinks, and (3) identifying appropriate reference or 'control' sites for monitoring. As incidental results, it will also reveal cryptic species and subspecies, indicate the importance of inbreeding and small effective population sizes in restricting recovery, and suggest suitable source colonies for translocations.

This is a well configured and cost-effective proposal for continued funding of a project that may provide information useful to management of seabird populations in the Gulf of Alaska. There are some uncertainties regarding how methods will be calibrated to allow effective application of coalescence theory, but this issue should be able to be addressed as the project goes forward. Fund.

Fund contingent on a reduced budget for the expected amount (\$86,200). This project is exploring genetic variations and relationships among seabirds both within and beyond the oil-spill area. This information will help in the development of appropriate strategies for the restoration and long-term management of seabirds, including clarifying the geography of populations affected by the oil spill.

FY99

FYNN

FY01

Total

99287-BAA

Seabird-Oceanographic Relationships in the Northern Gulf of Alaska: Integration with NSF Study "GLOBEC"

Project Abstract

This project will conduct a two-year study of seabirds in the Northern Gulf of Alaska (Ajalik Bay to Montague Island) by using a ship-of-opportunity sampling platform that is being used by the National Science Foundation project "GLOBEC" (Global Ocean Ecosystem Dynamics), which also will provide access to an extensive series of oceanographic data. The project will identify ecological processes affecting temporal (seasonal and interannual) and geographic variation in the distribution and abundance of seabirds, including species that were injured by the oil spill. It also will be useful to the restoration program by providing data on the year-round status of seabird populations and the processes that influence variation in their numbers.

R. Day/ABR, Inc.

NOAA New 1st yr.

2 yr. project

\$222.9

FY99

New or

Lead

\$0.0

\$0.0

\$0.0

\$0.0

Chief Scientist's Recommendation

This project would take advantage of a "ship of opportunity" to assess numbers, composition. and distribution of seabirds in relation to oceanographic factors along the "Seward line." The principal investigator is very good and the opportunity for additional collaboration with a GLOBEC project (they are funding the ship) is attractive. The proposed work, however, would fit most appropriately in the context of a long-term monitoring and research program, and it makes relatively little contribution in the near-term to the understanding of recovery of seabirds injured by the oil spill. Notwithstanding significant cost sharing by the proposers and GLOBEC, this is an expensive project. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. This project would survey seabirds at sea in relation to oceanographic features in the northern Gulf of Alaska. While this is an excellent opportunity for collaboration with GLOBEC and there is good cost sharing, this project is not directly related to current EVOS recovery objectives. This type of work may be most appropriate in the context of the potential EVOS long-term research and monitoring program and is premature at this time.

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New or

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99306	Ecology and Demographics of Pacific Sand Lance in Lower Cook Inlet	J. Piatt/USGS-BRD	DOI	Cont'd 3rd yr. 4 yr. proj	\$30.0 ect	\$30.0	\$20.0	\$0.0	\$50.0
	Designat Aberbarat	Chief Caiantialla Daganen	andalian		Constitut Di	andada Dun	linain and Da		J_4:

Project Abstract

This project will characterize the basic ecology, distribution, and demographics of sand lance in lower Cook Inlet. Recent declines of upper trophic level species in the Northern Gulf of Alaska have been linked to decreasing availability of forage fishes. Sand lance is the most important forage fish in most nearshore areas of the northern gulf. Despite its importance to commercial fish, seabirds, and marine mammals, little is known or published on the basic biology of this key prey species.

Chief Scientist's Recommendation

This project is producing valuable information on sand lance, which is a forage fish of fundamental importance to many species of seabirds and other predators. The student and his advisors are excellent, and the cost is low relative to the amount of work being performed. Fund.

Executive Director's Preliminary Recommendation Fund. This project is yielding valuable information about sand lance, a small forage fish that is of great ecological importance, especially to seabirds and marine mammals injured by the oil spill. The work is very cost effective, and the results will be very helpful to researchers in APEX (Project /163) and other projects.

FYOO

FY01

Total

99327 Pigeon Guillemot Restoration Research at the Alaska SeaLife Center

Project Abstract

This project will test the feasibility of direct restoration techniques for pigeon guillemots (e.g., installation of artificial nest sites, use of social attractants, captive propagation and release). While raising young guillemots in captivity, it will also be possible to conduct controlled experiments crucial to two other restoration objectives: (1) development of nondestructive biomarkers of petroleum hydrocarbon contamination, and (2) understanding how dietary factors (prey species composition, prey size, lipid content, feeding frequency) constrain growth, development, and condition at fledging in guillemots.

D. Roby/Oregon State Univ.

DOI Cont'd 2nd yr.

\$158.0

FY99

\$158.0

FY99

\$167.7

\$95.1

.1 \$420.8

4 yr. project

Chief Scientist's Recommendation

This proposal will provide a second year of support for work on pigeon guillemots at the Alaska SeaLife Center. The project is testing the feasibility of establishing a wild guillemot colony as a restoration technique, and it will develop information on blood biomarkers in response to oil exposure and examine the effects of diet on the growth of nesting guillemots. The principal investigators are excellent, and establishment of a wild guillemot colony at the Alaska SeaLife Center presents excellent opportunities for involvement by local students. Fund.

Executive Director's Preliminary Recommendation Fund contingent on (a) successfully obtaining the needed pigeon guillemot eggs in FY 98 and (b) submittal and review of detailed budget forms. This project will test a restoration method for pigeon guillemots and develop information on the effects of diet and oil on the blood chemistry and growth of nestling guillemots. The project is just now getting underway at the Alaska SeaLife Center. [NOTE: Funds for Alaska SeaLife Center bench fees (approximately \$4,900) need to be added to this project.]

Proj.No.	Project Title	Proposer	Lead Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99338	Survival of Adult Murres and Kittiwakes in Relation to Forage Fish Abundance	J. Piatt/USGS-BRD	DOI	Cont'd 2nd yr. 3 yr. projec	\$57.9 et	\$57.9	\$45.0	\$0.0	\$102.9

Project Abstract

Some seabird populations damaged by the oil spill continue to decline or are not recovering. In order to understand the ultimate cause of seabird population fluctuations, productivity, recruitment, and adult survival must be measured. Current APEX (Project /163) studies are focused on measuring productivity only. Recruitment measurement demands an unrealistic study duration. This project will augment current studies in lower Cook Inlet that relate breeding success and foraging effort to fluctuations in forage fish density by using banding and resighting to quantify the survival of adult common murres and black-legged kittiwakes.

Chief Scientist's Recommendation

The proposal is for a second year of support to relate the survival of adult murres and kittiwakes in lower Cook Inlet to the abundance of forage fish. This project complements on-going APEX (Project /163) work, and, indeed, the results of this project are very important for full interpretation of the APEX data. The project is relatively inexpensive and the principal investigator is excellent. Fund.

Executive Director's Preliminary Recommendation Fund. This project will provide information on whether the availability and quality of forage fish influences the survival of adult seabirds. The results will complement and be very important to the on-going work in APEX (Project /163), which focuses on the influence of forage fish on annual reproductive success and productivity. In combination, this project and APEX will contribute to understanding of seabird recovery (or lack of recovery) following the oil spill.

99346

Publication of an Indexed Bibliography of the Genus Ammodytes (Sand Lance)

Project Abstract

This is a request for additional funding to cover the cost of publication because the bibliography is much larger than our original estimate (about three times larger). This manuscript includes about 2,000 references and will total about 440 pages, single spaced. The final publication will include two additional chapters, in addition to the bibliography -- a review of sand lance biology and sand lance as a cornerstone species. Both of these review chapters should enhance the value of the bibliography considerably. The manuscript will be published as a General Technical Report by the U.S. Forest Service, Pacific Northwest Research Station.

R. Armstrong/UAA, M. Wilson/USFS, H. Robards/DOI

USFS Cont'd 2nd yr.

\$10.3

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\$10.3

\$0.0

\$0.0

\$10.3

2 yr. project

Chief Scientist's Recommendation

The aim of this project is to publish a bibliography and several synthesis chapters regarding the life history and ecology of sand lance, a key forage fish species for seabirds and marine mammals. The principal investigators have requested additional support because of a much larger than anticipated number of references that need to be included. Compiling and publishing this bibliography will provide a valuable service to EVOS researchers (e.g., in the APEX project). Fund.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of a more
detailed budget, including documentation of cost
estimates for the necessary printing job. This project
will result in publication of an annotated bibliography
and synthesis chapters on the life history and
ecology of sand lance, which is a small forage fish of
great ecological importance in the spill area. The
project was funded as a one-year project in FY 98.
However, the principal investigators found many more
citations than they had anticipated and need
additional funds for printing costs. The results of this
project will directly benefit the work of EVOS
researchers in several projects (e.g., APEX/163).

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99347	Fatty Acid Profile and Lipid Class Analysis for Estimating Diet Composition and Quality at Different Trophic Levels	R. Heintz/NOAA	NOAA	Cont'd 2nd yr. 3 yr. proje	\$105.4 ect	\$92.6	\$35.3	\$0.0	\$127.9

Project Abstract

This project will begin the systematic development of fatty acid profiles and lipid class analysis to identify diet differences and quality in forage fish and their prey. The spatial and temporal variability of fatty acid profiles in herring, sand lance, and zooplankton will be examined and related to the nutritional condition of these forage fish. The spatial comparisons, which began in FY 98, will provide insight into the energetic differences in forage fish in disparate parts of Prince William Sound. These comparisons are based on samples collected by APEX (Project /163). In FY 99, temporal comparisons will be made, which will provide information on the energetic changes that inevitably occur with seasonal, ontogenetic, and reproductive changes.

Chief Scientist's Recommendation

This project will provide information on variability in the fatty acid signatures of forage fish (herring and sand lance), which, in turn, will help interpret the fatty acid signatures of top predators, such as harbor seals and seabirds. This information will aid understanding of food limitations on the recovery of these predators. There is concern. however, that research on the fatty acid signatures of the forage fishes' zooplankton prev will be difficult and not likely to produce useful results, especially when such work is not linked to the zooplankton components of SEA (Project /320). I recommend funding this project contingent on a revised proposal deleting zooplankton work and a reduced budget, not to exceed the original projection for FY 99 (\$92,600).

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of (a) a
revised Detailed Project Description deleting the
zooplankton work and (b) a reduced budget not to
exceed the expected amount of \$92,600. This
project will extend work on fatty acids as a tool to
identify the diets of seabirds and marine mammals.
These data will help evaluate whether the availability
and quality of prey are limiting recovery of several
injured species.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99381	Status of Seabird Colonies in Northeastern Prince William Sound	M. Bishop/USFS	USFS	New 1st yr. 2 yr. projed	\$13.0	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

With the most recent colony data from 6-24 years old, current documentation on seabird colonies in northeastern Prince William Sound may not reflect recent changes in size, species composition, and location that may have occurred since the oil spill. Areas around northeastern Prince William Sound (Port Gravina to Orca Inlet) are pending purchase by the Trustee Council to aid in the restoration of injured species. These lands may be subject to increased human pressure that may increase human/wildlife interactions. This project will establish current population data for the seven known colonies in these areas and survey the coastline for suspected and unknown seabird colonies. Acquisition of this information is necessary to minimize human disturbance of injured species.

Chief Scientist's Recommendation

This inexpensive project would collect information about the size and composition of several small seabird colonies on lands in western Prince William Sound currently owned by Eyak Corporation that are expected to be transferred into public ownership, subject to shareholder vote. This information would be useful as the agencies develop management plans for these lands. However, project goals seem largely a normal agency management function. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This project would collect information
on several small seabird colonies located on lands in
eastern Prince William Sound that will be transferred
into public ownership (subject to Eyak shareholder
vote). Although the project is inexpensive and the
information would benefit development of appropriate
management plans, this work is largely a matter of
normal agency management.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99406	Field Examination of the Relation Between Phytoplankton Production of Fatty Acids and Uptake in Pacific Sand Lance	R. Heintz/NOAA	NOAA	New 1st yr. 2 yr. proje	\$106.2 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project will assess the basic assumption underlying the use of fatty acid analysis for examining trophic relationships. This demonstration is important because Trustee Council research projects based on this assumption are underway. The project will demonstrate the propagation of fatty acids through a simple food web by sampling phytoplankton, zooplankton and sandlance before and after the spring plankton bloom in Kachemak Bay. This field study will be coupled with a laboratory study designed to examine the fate of fatty acids as they are transferred between trophic levels. Together these experiments will examine the plausibility of the central assumption underlying the analysis of fatty acid compositions for identifying diet.

Chief Scientist's Recommendation

This proposal would examine changes in the fatty acid composition of sand lance before and after the spring plankton bloom and conduct other activities designed to understand the transformation of fatty acids as they pass to forage fish through the food web of Prince William Sound. A related project (/347) is providing information on variability of forage fish fatty acids as an aid to understanding how they might vary in their marine mammal predators, and there is other work (Project /371) recommended for funding in FY 99 that will also help interpret patterns being observed in marine mammals. It may be appropriate to investigate metabolic transformation of fatty acids in the lower portion of the food web after the projects supporting the marine mammal work have been completed and fully interpreted, but this work is premature at this time. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. This project would expand on current

research involving fatty acids as a means of determining the diets of seabirds and marine mammals. Although the work on fatty acids has produced exciting results, this project is premature until the projects supporting the marine mammal work have been completed and fully interpreted.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99434	East Amatuli Island Remote Video Link	M. O'Meara/Pratt Museum	DOI	New 1st yr. 1 yr. projed	\$80.4 ct	\$80.4			\$80.4

Project Abstract

Under this project, a microwave link will transmit live images and audio from East Amatuli Island to the Pratt Museum in Homer. Two cameras on the island will be used to test remote collection of data on seabird breeding parameters (e.g., nest attendance) as a supplement to monitoring programs, provide a vehicle for student involvement in restoration monitoring and allow members of the general public to view spill area resources and restoration research projects. Users at the Pratt Museum will pan, tilt, and zoom cameras to observe murres and kittiwakes. The cameras' computer control system will be programmed to store precise nest locations that can be revisited upon command, or automatically at specified intervals, to record images on video tape.

Chief Scientist's Recommendation

The Pratt Museum has demonstrated the educational and public relations value of this technique by installing a remotely operated video camera on Gull Island, and it is now proposed to investigate this technique as a long-term monitoring tool for the Barren Islands. There are many excellent parts of this proposal, including the willingness of the educational specialists to do rigorous assessment of the value of this product. Defer.

Executive Director's Preliminary Recommendation
Defer decision pending further review of funding
priorities. This project would place remotely operated
video cameras in the Barren Islands seabird colonies
as both a research and educational tool. A similar
set-up is now in place at Gull Island (near Homer),
and it is producing exciting results. There is potential
interest in this technology as a cost-effective
monitoring tool, and implementing it while APEX
(Project /163) is still in the field (FY 99 is the final year
of field work for APEX) would allow validation of this
potentially cost-effective approach to monitoring
colony activity. In addition, the proposal has
significant cost sharing from other sources.

99442-BAA

Population Trends and Productivity of Kittlitz's Murrelet in Prince William Sound

Project Abstract

This project will conduct a fourth and fifth year of investigations on the status and ecology of Kittlitz's murrelet, a rare seabird breeding in glaciated fjords of Prince William Sound. The project will emphasize evaluating population trends and productivity and will continue efforts from our previous project (/142) to evaluate the distribution and abundance, habitat use, and trophic position of this little-known seabird in northwestern Prince William Sound. Given uncertainty about population trends and productivity of this species, additional sampling is required to ensure its long-term conservation.

R. Day/ABR, Inc.

NOAA New 1st yr.

2 yr. project

\$231.0

FYQQ

Now or

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FY00

FY01

Total

\$0.0

\$0.0

\$0.0

\$0.0

Chief Scientist's Recommendation

The proposal would extend current work on Kittlitz's murrelets for another two years. To date, the work on this species has been excellent and is providing useful information on an injured species about which very little is known. The apparent lack of murrelet production in the first two years of this study is of concern. However, the work is very expensive, particularly considering the benefit to only a single species, and I would like to see the current work fully concluded and evaluated. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This project would add two years to the
work in Prince William Sound on Kittlitz's murrelet
(Project /142, which is closing out in FY 98). The
Kittlitz's murrelet is a small, rare, little-known seabird
that was injured by the oil spill. The current project
has been very good. However, the current work
should be fully closed out and the recovery status of
and objectives for this species reevaluated before
more work is considered.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99479	Effects of Food Stress on Survival and Reproductive Performance of Seabirds	J. Piatt/USGS-BRD, A. Kitaysky/Univ. of Washington	DOI	New 1st yr. 4 yr. projec	\$100.4 et	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project will measure the rise in blood levels of stress hormones such as corticosterone in response to a standardized stressor: capture, handling and restraint. This well-known response (found throughout vertebrates from fish to mammals) provides a strong assessment of whether or not a free-living population is chronically stressed or, if baseline levels of corticosterone appear normal, the stress-induced increase in corticosterone indicates potential for stress. This "field endocrinology" approach provides exact information on current stress status and the potential for stress in relating to quality and abundance of food. The project will investigate seabirds breeding in lower Cook Inlet and also use captive birds for controlled experiments at the Alaska SeaLife Center.

Chief Scientist's Recommendation

This is a proposal of significant academic merit by qualified principal investigators, but they do not adequately address the nonspecificity of cortical steroids as indicators of stress. These hormones elevate in response to factors besides reduced food availability, including the handling that occurs in order to take samples. While the proposers will standardize handling stress this may introduce a great deal of variability into the results. It is not clear that investigators will be able to separate the effects of handling from those of other factors in producing elevated corticosteroids. It is also not clear that monitoring corticosteroids, based on a mechanistic understanding of induction, offers advantages over more traditional ways (e.g., food supply estimates) of assessing indicators of population health. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This project would explore the use of
corticosteroids, a biochemical indicator of stress, as a
tool to monitor seabird populations. This is a
sophisticated proposal, but the Chief Scientist raises
significant technical concerns.

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99488	A Computerized Colony, Environment and Seabirds-at-Sea Database (ACCESS)	J. Piatt/USGS-BRD, G. Ford/Ecological Consulting, Inc.	DOI	New 1st yr. 3 yr. projed	\$119.4 ct	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

A number of large databases, yet to be synthesized, contain detailed information on the pelagic distribution of seabirds in Alaska. If compiled into A Computerized Colony, Environment, and Seabirds-at-Sea database (ACCESS), this information could be used to monitor recovery of seabirds from oil spills, assess impacts of commercial fisheries on marine birds, monitor long-term changes in marine ecosystems, plan and manage marine reserves, model and predict the impact of future oil spills on seabird colony populations, and estimate population sizes of rare or threatened species. A directed effort is required to complete a database archive and retrieval system that can be easily accessed by specialists or non-expert user groups.

Chief Scientist's Recommendation
I am persuaded that this proposal identifies an important problem, and properly archiving data would improve management of some injured species. However, the proposal is quite expensive, and seems to fall under normal agency management. It may be appropriate to consider in the context of the potential EVOS long-term monitoring program, but this proposal is premature in such a context. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This project would establish an easily
accessible computerized database on seabirds.
While there may be need for such a system, it would
be most relevant to EVOS restoration in the context
of the potential EVOS long-term monitoring program,
on which a decision is not expected until Fall 1998.
This is also a normal agency management function,
and the proposal would be strengthened with
substantial cost sharing.

FY99

FY00

FY01

Total

FY99

Archaeolog	gical Resources				\$173.3	\$166.7	\$0.0	\$0.0	\$166.7
99007A	Archaeological Index Site Monitoring	D. Reger/ADNR	ADNR	Cont'd 5th yr.	\$151.5	\$151.5			\$151.5
				8 yr. proje	ct				

Project Abstract

Monitoring of archaeological sites on public land injured by vandalism and oiling will concentrate on a sample of index sites in the three regions of the spill area. Oiled sites will be tested for reintroduced oil. A total of 11 sites will be visited in FY 99. Scattered instances of vandalism continue and monitoring will continue with return to sites initially identified but not recently monitored.

Chief Scientist's Recommendation
This project has been conducting ongoing evaluation of damage to archaeological sites from oil or vandalism. There has been no evidence showing that oil has migrated onto any of these sites, and after nine years it is justified to ask if vandalism can still be considered a by-product of the oil spill. I recommend that this project by carefully evaluated in FY 99 prior to continued funding in FY 00. Fund.

Executive Director's Preliminary Recommendation Fund. This project monitors archaeological sites injured by vandalism and oiling. However, because nine years have elapsed since the spill, the injury that is being detected may have little relevance to the spill. Funding beyond FY 99 should be based on a careful evaluation of the restoration value of this project.

6/10/98

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02		
99149-CLO	Archaeological Site Stewardship	D. Reger/ADNR	ADNR	Cont'd 4th yr. 4 yr. pro	\$15.2 Dject	\$15.2	\$0.0	\$0.0	\$15.2		
been aimed a cadre of v the oil spill a monitoring. damaged si Bay, Uganik the Alaska F summarize of activity, o	Project Abstract blogical site stewardship program has at providing training and coordination for olunteers to monitor vandalized sites in area beyond the ability of agency Volunteer site stewards monitored tes on the Kenai Peninsula, Kachemak a Bay, Uyak Bay, and the Chignik area of Peninsula. Closeout of the project will accomplishments of the past three years outline conclusions about usefulness and the program and identify future directions rograms.	Chief Scientist's Recommendation This is the closeout for the project. Fund.			Executive Director's Preliminary Recommendation Fund closeout (report writing) of this project. This project has trained and coordinated volunteers to monitor vandalized archaeological sites in the spill area.						
99298	Public Brochure on Archaeology at the Alaska SeaLife Center	M. Yarborough/Cultural Resource Consultants	DOI	New 1st yr. 1 yr. pro	\$6.6 oject	\$0.0	\$0.0	\$0.0	\$0.0		
archaeologi construction The brochul and maps of and drawing It will focus earliest Ame publication what has be SeaLife Cer richness and oil spill area	Project Abstract will produce a public brochure describing cal research undertaken during of the Alaska SeaLife Center in Seward. The will contain both historic photographs of the Seward waterfront, and photographs of the Seward waterfront, and photographs of the archaeological investigations. The proposal includes production of the for the brochure and 2,000 copies.	Chief Scientist's Recommendation A brochure on the archaeology at Alaska SeaLife Center is not a priority fund.	he site of		Executive Directly with the Seward or the project idea.	he propose e Alaska S	er is encou eaLife Cen	raged to w ter, the Cit	vork ty of		

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Subsistence					\$4,369.1	\$2,054.7	\$421.6	\$307.0	\$3,087.6
99052A	Community Involvement	P. Brown- Schwalenberg/CRRC	ADFG	Cont'd 5th yr. 8 yr. proj	\$255.7	\$241.8	\$180.0	\$180.0	\$781.8

Project Abstract

This project will increase community involvement in the restoration process. The Spill Area-Wide Coordinator's work will continue through a contract with the Chugach Regional Resources Commission (CRRC). Through direct communication with a network of local facilitators, the Spill Area-Wide Coordinator will continue to actively involve local residents in the restoration program. (Local facilitators are located in Tatitlek, Chenega Bay, Port Graham, Nanwalek, Cordova, Seward, Seldovia, Valdez, Kodiak, and Alaska Peninsula.) In FY 99, a network of high school interns will be created in the Kodiak Island region. In cooperation with CRRC, the Kodiak Island Borough School District will select one high school student from each of six communities (Port Lions, Larsen Bay, Karluk, Akhiok, Old Harbor, Kodiak City) to serve as local facilitators. In addition, the interns will facilitate school and community discussions about the restoration program.

Chief Scientist's Recommendation

This project continues to be a priority with the spill-area communities. However, although communications seem to have improved during the past year and the Community Facilitators' monthly reports are being submitted in a more timely fashion, accountability remains an issue. For example, proposals from the communities could be improved and overdue local resource inventories should be supplied. To improve accountability, future quarterly and annual reports should provide a more thorough accounting of the status of the Community Facilitators' monthly reports and other efforts. The use of student interns in Kodiak Island communities seems like an appropriate approach, but clear tasks for the interns must be identified and their performance evaluated regularly to ensure that project objectives are being met. Fund, but consider future budget reductions if accountability is not improved.

Executive Director's Preliminary Recommendation Fund, including addition of student interns in Kodiak Island communities, contingent on submittal of late reports (95279, 97052A, 97052B) and reduced budget. This project, which is designed to facilitate communication and interaction among the Trustee Council, scientists, and residents of communities impacted by the oil spill, responds to an important goal of the Trustee Council. Villages in the spill region have said that this project is of the highest importance because it gives them a voice in the restoration process. In FY 99, the quarterly reports submitted by the Spill Area Wide Coordinator to the Restoration Office should contain a more complete accounting of each Community Facilitator's efforts. In FY 2000 and beyond, the Trustee Council contribution to this project will be reduced consistent with the overall reduction in the restoration program.

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom. FY99-02
99052B	Traditional Ecological Knowledge	P. Brown- Schwalenberg/CRRC, H. Huntington	ADFG	Cont'd 3rd vr.	\$70.8	\$0.0		\$0.0

Project Abstract

This project will fund a TEK (Traditional Ecological Knowledge) specialist to (1) provide technical assistance to restoration project principal investigators who plan to use, or for whom it would be appropriate to use, TEK, (2) serve as a contact point for spill area communities, the community facilitators and Spill Area-Wide Coordinator hired under Project /052A, and principal investigators on issues related to TEK, and (3) organize and coordinate synthesis workshops between principal investigators and community experts. Also, community workshops will be held to enhance understanding of the benefits and implications of working with TEK. These workshops may involve experts who have experience in applying TEK from an Alaska Native perspective. The Alaska Department of Fish and Game will provide staff support for the project.

Chief Scientist's Recommendation

The goal of this project, which is the exchange of knowledge from traditional and local sources and scientific studies, is worthy. However, the project has now been funded for three years and has achieved few concrete results. When this project was funded in FY 98, it was with the understanding that funding in FY 99 would be contingent upon a favorable review of FY 98 results. The approach proposed for FY 99 is identical to that funded in FY 98 -- synthesis workshops where information on specific resources is exchanged, and training workshops where local residents discuss the value of their knowledge. However, very few workshops have been held in FY 98 so it is difficult to evaluate the effect of this approach. The Detailed Project Description does not describe FY 98 results and the annual report due April 15, 1998 has not been submitted. It is also still not clear what level of support this project has in the communities. although a Community Facilitator retreat scheduled for June 1998 may help clarify this point. In FY 99, consideration should be given to dismantling this project by transferring funds into 99052A/Community Involvement for synthesis workshops, funding the TEK Specialist's technical assistance efforts through individual restoration projects (for example, Project 99320T-Supp/Herring TEK contains \$6,000 for this purpose, which as currently written seems to duplicate funding provided for technical assistance in Project 99052B), and turning our attention to other projects that incorporate TEK (such as 99245/Community-Based Harbor Seal Biosampling and 99444/Community-Based Harbor Seal Research). Do not fund.

DRAFT

Executive Director's Preliminary Recommendation Do not fund as proposed. This project, first funded in FY 95, has tried different approaches over the years in an attempt to find an effective way to use traditional and local knowledge in the restoration of injured resources. It remains unclear whether or not the project is meeting its objectives. The informational workshops held by one of the seaduck principal investigators (projects /273 and /427) in Tatitlek and Port Graham in FY 98 were by all reports worthwhile, and I would support a small amount of funding for similar workshops in FY 99 if specific workshops can be identified. Technical assistance to EVOS principal investigators was limited in FY 98 to Project 98320T/Herring TEK. This project is closing out in FY 99, and funds for the TEK Specialist's assistance in data analysis/report writing are currently duplicated in 99320T and 99052B. It might be worthwhile to consider new strategies for this project. Perhaps the Community Facilitator retreat in early June will provide some guidance.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02	
99127-CLO	Tatitlek Coho Salmon Release	G. Kompkoff/Tatitlek IRA Council	ADFG	Cont'd 5th yr. 5 yr. pro	\$10.7 oject	\$10.7	\$0.0	\$0.0	\$10.7	
Boulder Bay coho eggs t from an Ala: approved st the Solomoi for two weel release. Re	Project Abstract will create a coho salmon return to near the village of Tatitlek. Enough to produce 20,000 smolt will be collected ska Department of Fish and Game tream, incubated and reared to smolt at n Gulch Hatchery, transported, and held ks in net pens in Boulder Bay before elease will produce a 2,000 to 3,000 adult sulder Bay for harvest in a subsistence	Chief Scientist's Recommendation This is the final year of an apparently successful project to provide temporary replacement resources. Fund.			Executive Director's Preliminary Recommendation Fund closeout of this project contingent on submittal of late report (97127). This project is creating a "put and take" coho salmon run near Tatitlek as a replacement resource for subsistence resources injured by the oil spill. Twenty thousand smolt are released annually in Boulder Bay for each year in which the project is carried out. Coho are currently returning to Tatitlek and are being used by subsistence and sport fishermen.					
99131	Chugach Native Region Clam Restoration	P. Brown- Schwalenberg/ CRRC	ADFG	Cont'd 5th yr. 5 yr. pro	\$285.4 piect	\$285.4	\$0.0	\$0.0	\$285.4	
accessible so villages in the FY 99 the so developing of producing lift Hatchery are seed placed 98. Total seexceed five of seeding work will be	Project Abstract we procedures for establishing easily subsistence clam populations near Native ne oil spill region will be established. In cope of work will be confined to effective, standardized techniques for ttleneck clam seed at the Qutekcak nd analyzing growth and mortality of this on the beaches in FY 96, FY 97 and FY eeded area during the project will not hectares. Follow-up research on success will be conducted. Growout development confined to areas near the Native villages Nanwalek and Port Graham.	Chief Scientist's Recommendation Defer decision pending site visit ar reivew in Fall 1998.			Executive Dir Defer decision technical revie funded, FY 99 contribution to reestablish loc for subsistence FY 99, in respectable Trustee Counce emphasis wou standardized to of littleneck cla of the seed pla Additional clan beaches (Port in order to mai reestablishing	pending had we session so will be final this project all clam poper resources onse to ear bill and the pechniques from and anothed on being seed would Graham, Notain the design of the pechniques of the pechniqu	atchery site scheduled for the hatchery accept the hatcher in property accept the hatcher in property acches in property accept the hatcher in property accept the hatcher in property accept in property a	visit and for Fall 199 ustee Cou an effort to replacement the oil spin from the ers, the ent of hery produkth and mior years. The red on projectitlek) in	98. If noil nents II. In nortality	

Proj.No.	Project Title	Proposer	Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99210	Youth Area Watch	R. Sampson/Chugach S District	school ADFG	Cont'd 4th yr.	\$139.5	\$139.5	\$123.1	\$107.0	\$465.9
				7 yr. proj	ject				
	Project Abstract	Chief Scientist's Reco	ommendation		Executive Di	rector's Pre	liminary Re	commend	<u>lation</u>
The Vouth	· Area Watch project links students in:	the oil. This project continues t	o do a good job of		Fund contings	ant on (a) er	ibmittal of t	ha lana ta	rm

The Youth Area Watch project links students in the oil spill impacted area with research and monitoring projects funded through the Trustee Council. The goal is to involve students in the restoration process, and give these individuals the skills to participate in oil spill restoration activities now and in the years to come. Youth conduct research identified by EVOS principal investigators who have indicated interest in working with students in oil spill impacted communities. Youth Area Watch serves as a positive example of community investment in the restoration

process. Participating communities are Tatitlek, Chenega Bay, Cordova, Seward, Valdez, Whittier,

This project continues to do a good job of meeting its goal of involving youth in the restoration process and should be funded again in FY 99. Consideration should be given to combining this project with a similar proposal (99401) to establish a Youth Area Watch program in lower Cook Inlet. Fund.

Fund contingent on (a) submittal of the long-term funding plan called for by the Trustee Council in the FY 98 Work Plan, (b) submittal of the manuscript called for in the FY 98 Work Plan, (c) clarification of some budget items, and (d) exploration of the idea of including students from Port Graham, Nanwalek, and Seldovia as proposed in Project 99410. This project is designed to involve local youth in restoration projects. Youth in Chenega Bay, Tatitlek, Cordova, Whittier, Valdez, Hinchinbrook Island, and Seward currently participate in the program.

and a remote site.

99225

Port Graham Pink Salmon Subsistence Project

E. Anahonak/Port Graham IRA Council

ADFG Cont'd 4th yr. 5 yr. project

\$75.6 \$75.6

EV00

. .

m\/00

\$75.0

\$0.0

\$150.6

Project Abstract This project will help supply pink salmon for subsistence use in the Port Graham area during the broodstock development phase of the Port Graham hatchery. Because local runs of coho and sockeye salmon, the more traditional salmon subsistence resource, are at low levels pink salmon are being heavily relied on for subsistence. This project will help ensure that pink salmon remain available for subsistence use until the more traditional species are rejuvenated. Two strategies are being employed: increased fisheries management surveillance to maximize use of the adult pink salmon return and increasing marine survival of hatchery produced pink salmon.

Chief Scientist's Recommendation

This project has been making satisfactory progress toward its objectives. However, the loss in a fire of the Port Graham hatchery could make it difficult to achieve this project's objective of providing pink salmon for local subsistence use. A temporary alternative building has been identified, which may allow project completion. Fund contingent on establishing the alternative facilities for hatchery operations.

Executive Director's Preliminary Recommendation Fund contingent on the temporary incubation facility being up and running. This project is supplying pink salmon in the Port Graham area during the broodstock development phase of the Port Graham hatchery, replacing runs of coho and sockeye salmon depleted since the oil spill. Although a January 1998 fire destroyed the hatchery facility, steps have since been taken through the reprogramming of Project 98225 funds and a grant from the State's EVOS criminal fund to set up a temporary incubation facility. This should allow the broodstock development process to stay on track. Trustee Council funding will end in FY 2000, which is when the broodstock development phase is to be complete.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom. FY99-02
99245	Community-Based Harbor Seal Management and Biological Sampling	J. Fall/ADFG, M. Riedel/Alaska Harbor Seal Commission	ADFG	New 1st yr. 4 yr. projec	\$85.9	\$70.0		\$70.0

Project Abstract

This project will continue the harbor seal biological sample collection program begun under Project /244. The program was initiated in FY 96 and expanded in FY 97 in Prince William Sound, lower Cook Inlet, and Kodiak Island. FY 98 was scheduled to be Project /244's close-out year. Under the biosampling program, village-based technicians are selected by the Alaska Native Harbor Seal Commission and trained by the Alaska Department of Fish and Game to collect samples. The samples are transported to Anchorage or Kodiak for further sampling and distribution to participating scientists for analysis. Under Project 99245, the Alaska Native Harbor Seal Commission will also organize a two-day workshop, and produce and distribute a newsletter with summaries of the biological sampling program.

Chief Scientist's Recommendation

This project has been a highly successful effort to obtain harbor seal tissue samples through the efforts of subsistence hunters, with participation by students in the Youth Area Watch. The samples obtained have been useful to harbor seal researchers. In addition, the educational work and the involvement and active cooperation with community residents will undoubtedly benefit harbor seals over the long term. This project should be continued. However, there is concern about two issues raised previously: attention to the tissue data base and development of a long-range funding plan. Fund contingent on the above issues being addressed.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of final report, expected July 1998, on FY 96-98 pilot project (/244). The report must address, among other things, the long-range funding plan raised in the Chief Scientist's recommendation. A memo to the Executive Director addressing the tissue data base has been submitted. If this project is funded, funding would be contingent on resolution of budget issues. This project would enable the Alaska Native Harbor Seal Commission to continue its biological sample collection program for harbor seals in Prince William Sound, lower Cook Inlet, and the Kodiak area. These samples are provided to ongoing EVOS projects which seek to explain why harbor seals are not recovering.

99247 Kametolook River Coho Salmon Subsistence Project

Project Abstract

Subsistence users from the Alaska Peninsula Native Village of Perryville have noted significant declines in the coho salmon run in the nearby Kametolook River since the oil spill. Criminal settlement funds were used in FY 96 to determine what method would best restore the river's coho salmon stock to historic levels. This project will provide funding through FY 2002 for the Alaska Department of Fish and Game to try conservative and safe restoration methods. Instream incubation boxes have been evaluated and selected as the primary restoration tool to rebuild the depressed coho salmon stock needed for subsistence in the Kametolook River.

J. McCullough, L. Scarbrough/ADFG

ADFG Cont'd 3rd yr. 6 yr. project

\$20.8

EVOO

EVOG

\$19.6

\$20.0

\$20.0

\$87.6

Chief Scientist's Recommendation

his continuing project is meeting its object

This continuing project is meeting its objectives. Fund.

Executive Director's Preliminary Recommendation
Fund contingent on submittal and review of revised
budget with slightly reduced travel costs. This project
is using instream incubation boxes to enhance a
small coho salmon run near the Alaska Peninsula
village of Perryville as a replacement for subsistence
resources injured by the oil spill. Trustee Council
funding is anticipated through FY 02, at which time
the run is expected to be self-sustaining.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99256B	Sockeye Salmon Stocking at Solf Lake	D. Gillikin/USFS, P. Shields/ADFG	USFS	Cont'd 4th yr.	\$68.3	\$68.3			\$68.3
				7 yr. proje	ect				
	Drainet Abetreet	Chief Scientist's Becommendati		r	Typoputing Di	ractoria Dra	liminan, Da		ation

Project Abstract

This project will benefit subsistence users of Prince William Sound focusing on residents of Chenega Bay. Solf Lake has been recognized for many years as an excellent opportunity to reestablish a self-sustaining sockeve salmon run lost as a result of an earthquake in the 1930's. Initial investigations, beginning in FY 96, indicate the lake is still capable of supporting a harvestable population of salmon provided access to migratory fish is improved. Work proposed for FY 99 includes finalizing the design on the migration channel, collecting eggs, rearing and releasing sockeye fry, and monitoring fish out-migration and the limnological characteristics of the lake.

Chief Scientist's Recommendation This continuing project is meeting its objectives.

and could produce long-term benefits to the local community of Chenega Bay, Fund, but reevaluate after the FY 2000 construction estimate is refined.

Executive Director's Preliminary Recommendation Fund FY 99. Funding for FY 2000 and beyond will be considered once the fishway survey and engineering are complete and the construction cost estimate is refined. This project is intended to provide sockeye salmon as a replacement for subsistence fishing resources injured by the oil spill, particularly for the residents of Chenega Bay. The Alaska Department of Fish and Game has determined that Solf Lake can support a sustainable run of 10,000 sockeye salmon. Stocking began in FY 98; the first adult sockeye are expected to return in 2002.

99263

Assessment, Protection and Enhancement of Salmon Streams in Lower Cook Inlet

Project Abstract

This project will replace lost subsistence services by constructing enhancement projects on major salmon streams in the lower Cook Inlet spill area. Protection and enhancement will be implemented using instream fisheries habitat improvement techniques, primarily creation of spawning channels, removal of natural barriers to spawning, and wall-based rearing structures. Port Graham Corporation management, with advice from an Alaska Department of Fish and Game fisheries specialist, will supervise the project and coordinate with a professional fisheries scientist and resource consultants. Local subsistence users will be employed as technical assistants during the field survey and during construction of the habitat improvement structures.

W. Meganack, Jr./Port Graham Corporation

ADFG Cont'd

3rd yr.

\$42.0

\$67.2

EVOG

EVOO

\$23.5

\$0.0

\$65.5

4 yr. project

Chief Scientist's Recommendation

This project's objective depends on successful completion of permitting, design, and construction in FY 98. If it meets its FY 98 objectives, it is appropriate to monitor results. However, no new instream construction and enhancement projects should be undertaken other than planting vegetation around existing nursery ponds. Fund at reduced level.

Executive Director's Preliminary Recommendation Fund, including new objective to plant vegetation around the rearing ponds on Windy Creek, contingent on (a) satisfactory completion of FY 98 construction of stream improvements, (b) submittal and review of a revised Detailed Project Description that more accurately reflects the project's scope (i.e., Port Graham River and Windy Creek only), and (c) submittal and review of a more detailed budget at a reduced level. The goal of this project is to protect and enhance salmon streams important to the restoration of subsistence in the Port Graham area. FY 98 funding was provided in two phases: Phase 1 (NEPA, permitting, engineering/design) is currently underway; Phase 2 (construction) will be authorized upon the completion of Phase 1.

Minima

EVOO

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99273	Surf Scoter and Goldeneye Life History and Ecology: Linking Satellite Technology with Traditional Knowledge to Conserve the Resource	D. Rosenberg/ADFG	ADFG	Cont'd 2nd yr. 3 yr. proje	\$237.6 ect	\$185.0		\$0.0	\$185.0

Project Abstract

This project will study the life history and ecology of surf scoters and Barrow's goldeneyes that over-winter in Prince William Sound and lower Cook Inlet. This information will be integrated with traditional ecological knowledge. Scoter and goldeneye populations in Alaska are declining. Communities in Prince William Sound and lower Cook Inlet harvest scoters and goldeneyes for subsistence purposes. Scoters are among the least studied of North American waterfowl and little is known of their life history, ecology, and distribution. The nesting and molting distribution of Barrow's goldeneyes wintering in Prince William Sound is unknown. Scoters and Barrow's goldeneyes will be marked with surgically implanted satellite transmitters to define the breeding areas, molting areas, and wintering areas. Local participation will be solicited and information will be conveyed to local residents through the Chugach School District and Youth Area Watch project (\210).

Chief Scientist's Recommendation

This is the second year of a three-year project to document nesting and breeding areas of Prince William Sound scoters, which are important to subsistence users. In FY 98, the principal investigator has outfitted a sample of scoters with transmitters. He also has worked hard and closely with community residents, which is to be commended. In FY 99, addition of Barrow's goldeneye to the study is proposed. I cannot recommend the addition of Barrow's goldeneye at this stage of the project, especially since the status of this species is under review by the Trustee Council in 1998. Fund at reduced level based on revised proposal deleting work on Barrow's goldeneyes.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of revised Detailed Project Description and budget that eliminate objectives related to the Barrow's goldeneye. The principal investigator is to be commended for working closely with community residents on this project. For FY 99, the investigator should pursue hiring local residents to fill the project's field technician positions. This project is studying the life history and ecology of surf scoters (in Prince William Sound in FY 98; sites in lower Cook Inlet will be added in FY 99) as the first step in determining the cause of their suspected population decline and developing conservation and management strategies to ensure the long-term health of the population. Surf scoters are not on the injured species list. However, the Trustee Council's Restoration Plan allows restoration actions to address resources not on the list if the action will benefit an injured resource or service; this project would benefit the service of subsistence.

Proj.No	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99333	Sea Otter Monitoring	B. Henrichs/Native Village of Eyak	DOI	New 1st yr. 4 yr. projec	\$250.0 et	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

Orca Bay in front of Eyak/Cordova, is the home to one of the largest sea otter herds in the world. Over the past twenty years, the local processors' practice of grinding up fish waste and pumping it into the bay has provided an additional food source for sea otters. The amount of fish waste reaches 50 million pounds in some years. Sea otters have eaten everything else that there is to eat and this fish waste is a main staple of their diet. Recent autopsies have show that the bones in this fish waste have poked holes in sea otters' intestines and they have picked up parasites from this fish waste. These parasites could spread to other marine mammals and other fish. This could possibly cause major problems with sea life throughout Alaska. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

Chief Scientist's Recommendation

This proposal suggests that consumption of fish offal by otters in Orca Inlet is resulting in their death through parasitic infection, and requests \$1.25 million over five-years for an unspecified program to address this problem. As the otter population in Eastern Prince William Sound appears healthy, the monitoring of ongoing health status unrelated to the oil spill would seem to fall under normal agency management. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. This proposal is somewhat vague and expensive, and may be beyond the purview of the Trustee Council. However, like Project 99503, it raises a good question in regard to the effects of fish waste on the Orca Inlet ecosystem. Restoration Office staff should assist the proposer in obtaining information from other sources (U.S. Environmental Protection Agency, Alaska Department of Environmental Conservation, and others) about this issue.

99335

Construction and Operation of a Sockeye Hatchery in Nanwalek

Project Abstract

This project will construct a sockeye hatchery in Nanwalek. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

P. McCollum/Nanwalek

fund.

ADFG New

\$0.0

\$0.0

\$0.0

\$0.0

Executive Director's Preliminary Recommendation

Even if the proposal were to be fully developed, the link to the restoration program is likely to be weak. In addition there are major technical hurdles that need to be overcome, as sockeye are prone to a virulent and fatal contagious disease (IHN) that makes them very difficult to culture in a hatchery environment. Such hatcheries have serious and expensive problems.

so I recommend against this project. Do not

Chief Scientist's Recommendation

Do not fund. This project would provide funds to develop a sockeye salmon hatchery in the Alaska Native village of Nanwalek. The project is intended to replace subsistence and commercial fishery resources lost due to the oil spill by increasing sockeye salmon production in lower Cook Inlet. However, the existing arrangement between Nanwalek and the Port Graham hatchery has achieved reestablishment of the sockeye return to Nanwalek. Construction of a hatchery in Nanwalek at this point has little link to the Trustee Council's restoration objectives.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99401	Spot Shrimp: A Population Dynamics Study	C. Hughey/Valdez Native Tribe	ADFG	New 1st yr. 2 yr. pro	\$70.1 ject	\$70.1			\$70.1
distribution to determing population the oil spill determine seasonal of	Project Abstract ct will study population abundance and in in various areas of Prince William Sound ne whether or not the spot shrimp has sufficiently reestablished itself since I. The study will provide data needed to if the spot shrimp populations can sustain openings for subsistence, personal use and all fishing in Prince William Sound.	Chief Scientist's Recommendar This is a very strong community-land merits further development to additional technical review. Dete of revised proposal.	pased prop allow for	review	Executive Directory per persistence of the persiste	on funding eer review of ption and be ber of shring subsistence t seasons has project w	pending sof a more coudget. Comp have been users. Sinave diminityould study	ubmittal a complete Described processed in the contraction of the cont	nd etailed er the I spill, e point dance

99405 Port Graham Salmon Hatchery
Reconstruction

Council

E. McMullen/Port Graham Village

ADFG New 1st yr. 1 yr. project

\$777.5 \$777.5

would benefit the service of subsistence.

\$777.5

Project Abstract

This project will help rebuild the Port Graham salmon hatchery that was destroyed in a fire on January 13, 1998. The Port Graham hatchery was involved in the rehabilitation and enhancement of local pink salmon, sockeye salmon and coho salmon stocks for the benefit of both the local subsistence and commercial fisheries. These stocks are of major social, cultural and economic importance to the area and sustained injuries resulting from oil spill clean-up efforts. This project will help fund design, engineering, site preparation, and construction of a salmon hatchery to replace the one that was destroyed in the fire.

Chief Scientist's Recommendation

The loss of the Port Graham hatchery was tragic. While the Trustee Council has invested heavily in subsidizing production of some traditional foods that were part of an injury to subsistence it is not clear if building a hatchery, the subsequent operation of which could have effects on wild stocks of fish, is consistent with general supplementation guidelines for the Restoration Program.

Executive Director's Preliminary Recommendation
Defer decision pending (a) review of this project's
legal permissibility and (b) submittal of more complete
information on the facility's design and cost and the
contribution of funds from other sources, including
the Port Graham Village Council and Port Graham
Corporation. If the Trustee Council were to fund this
project, the entire hatchery operation would need to
undergo a NEPA (National Environmental Policy Act)
analysis. [NOTE: If funded, funds for this project
would be outside of the regular FY 99 work plan of
research, monitoring, and general restoration
projects.]

Sound to determine whether the population can sustain seasonal openings for subsistence, personal use, and commercial fishing, or whether additional protective measures should be taken. Shrimp are not on the injured species list. However, the Trustee Council's Restoration Plan allows restoration actions to address resources not on the list if the action will benefit an injured resource or service; this project

6/10/98

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
(similar to F Port Graha was submit funding, a I	Lower Cook Inlet Youth Area Watch Project Abstract t will create a Youth Area Watch program Project /210) for students from Seldovia, m, and Nanwalek. [NOTE: This proposal tted as an idea; if recommended for Detailed Project Description and detailed need to be prepared.]	This proposal is modeled after Yo (Project /210), which has been un Prince William Sound region since project has been effective at involute restoration process, and expa program to three communities in I seems reasonable. However, I w recommend that a modest amount this expansion be added to Project than setting up a separate admini	vsaas/Seldovia Village Tribe ADFG New nief Scientist's Recommendation proposal is modeled after Youth Area Watch ject /210), which has been underway in the ce William Sound region since FY 96. That ect has been effective at involving youth in restoration process, and expansion of the gram to three communities in lower Cook Inlet ms reasonable. However, I would immend that a modest amount of funds for expansion be added to Project 99210, rather is setting up a separate administrative cure under Project 99410. Do not fund as a					\$0.0 ecommend ut explore Area Wat	
99416	O'Brien Creek Restoration	J. Christensen/Chenega Bay IRA	USFS	New 1st yr. 2 yr. pro	\$19.3	\$0.0	\$0.0	\$0.0	\$0.0
area declin other comm harvest lev prespill leve subsistence water flow resulted in to become project will channel so	Project Abstract the use of resources in the spill-impacted and following the spill. Unlike many of the munities in the spill area, subsistence also in Chenega Bay have not returned to also. This project will help the recovery of a users in Chenega Bay by restoring the atto O'Brien Creek. The 1964 earthquake outwash deposits that caused the stream subterranean at low flow levels. This examine the feasibility of restoring the atthat salmon have access to the stream antify opportunities to improve rearing	Chief Scientist's Recommendat This proposal would examine the restoration of O'Brien Creek, near Chenega Bay, to pre-earthquake characteristics. This would be a r action in order to compensate for subsistence resources following t Trustee Council has invested in a projects to specifically compensat losses at Chenega Bay, including sockeye run at nearby Solf Lake (and funding of a terminal chinook in Crab Bay (Project /272). In ado potential for high supplementation	feasibility of the village hydrologic eplacement the lost us he spill. The number of the for such restoration (Project /28 salmon fissition, the costs follogical projects for the projects follogical projects for the	of e of al nt e of he f n of a 56B) shery	Executive Dir Do not fund. T reestablish a c village of Cher subsistence re spill, may be re tentatively sche helping to eval service for the conducted.	This project oho run in aega Bay as sources los econsidered eduled for luate the state.	, which is d O'Brien Cro s a replace st or reduce d after subs Fall 1998 (a atus of the	lesigned to eek near the ment for o ed during the sistence si as a mean subsistence	ther the oil urveys s of

initial engineering estimates are a concern. Do

not fund.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99444	Community-Based Harbor Seal Research	M. Riedel/Alaska Native Harbor Seal Commission	ADFG	New 1st yr. 2 yr. pro	\$69.2 nject	\$69.2	\$0.0	\$0.0	\$69.2
William Sou while those Sound are knowledge hunters. Eduring the funderstand Vessel-bas seasonal use contrast the 3) identify r	Project Abstract I numbers in Port Gravina in eastern Prince and are showing strong signs of recovery at oiled sites in central Prince William not. This one-year pilot project will use the and expertise of local subsistence valuating factors affecting harbor seals fall-winter-spring is critical for ling factors affecting harbor seal recovery. The description of seals in each region, regional and ecological factors that may be with observed differences in harbor seal.	Chief Scientist's Recommendat This is an innovative project that I provide valuable information on h populations in the winter, and pos corroborate aerial suvey data pro 99064. Questions of feasibility rel weather, sampling methodology, training make this a higher risk pr questions cannot be answered wi implementing the project for a pild proposal appears cost-effective, a effort has been made to refine thi from the proposal submitted in FN one year contingent on receipt of	has potent arbor seal sibly vided in Prated to and observoject, but to year. The and signific s submissi / 97. Fund	roject ver these e cant ion d only	Executive Direction Fund contingeration with Department of Marine Fisheri Scientist's continuous one-year pilot surveys to investivities of hat this project she collected under overall unders harbor seals.	int on submot Description work under Fish and Greens about project will estigate searbor seals. Fould completer Project /0 tanding of t	aittal and re on that (a) erway by the Game and the and (b) add the samp conduct fat asonal distre The data of ement sum the recover	view of a redemonstrate Alaska he Nationadresses the ling designation and collected at the mer surventribute to status of the status of the designation and collected at the ling status of the designation and the ling status of the ling status of the designation and the ling status of the line status of the line status of the line status of the line status of the ling status of the line stat	revised ates al e Chief n. This pring d under y data our f

Seldovia Coho Salmon Enhancement 99483 Project Abstract

use, and 4) document potentially sensitive harbor

seal habitats or temporal periods that may affect

This project will create a coho salmon return to Seldovia Bay as a means of enhancing subsistence resources. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

L. Elvsaas/Seldovia Village Tribe ADFG New Chief Scientist's Recommendation

proposal demonstrating active coordination and

integration with the Alaska Department of Fish

Services, as well as addressing sampling and

and Game and National Marine Fisheries

censusing issues.

Proposal does not provide adequate explanation of need or relevance of project. There may be merit in local enhancement. However, the proposers have not provided enough information on the need for the project and I am reluctant to undertake another local enhancement project that will not be self-sustaining this late in the Restoration Program. Do not fund.

harbor seals. The project will be implemented by subsistence users, will rely in part on traditional and local knowledge, and may promote local stewardship of the resource. The final report on this project should be prepared with FY 99 funds and submitted by September 30, 1999.

Executive Director's Preliminary Recommendation Do not fund. At this time, ten years after the oil spill, there is not a compelling reason to begin a remote release project that is not self-sustaining.

\$0.0

\$0.0

\$0.0

\$0.0

6/10/98

recovery.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02	
99484	Construction of Chignik Lake Subsistence Building and Repair of Sod House	V. Aleck/Chignik Lake Village Council	ADFG	New 1st yr. 1 yr. pr	\$341.3 oject	\$0.0	\$0.0	\$0.0	\$0.0	
recomme	Project Abstract This proposal was submitted as an idea; if ended for funding, a Detailed Project on and detailed budget will need to be .]	Chief Scientist's Recommendary In regard to the subsistence add subsistence building was originary with the State's EVOS criminal subspace a policy decision would be requised this is an appropriate project for sod house would appear to be use EVOS injury to archaeological refund.	ition, since ally construct ettlement for red on whe civil funds. nrelated to	cted unds, ther The	received requests in the past for facility construction ds, in spill-region villages, such projects have been found not to be legally permissible. The State's EVOS criminal fund subsistence grants, administered by the Alaska Department of Community and Regional					
99485	Port Graham Youth Subsistence Education	E. McMullen/Port Graham Village Council	DOI	New 1st yr. 2 yr. pr	\$10.8	\$0.0	\$0.0	\$0.0	\$0.0	
aimed at Graham. and elem week-lon	Project Abstract ect will assist in a summer education program the revitalization of subsistence in Port Three groups of youth, teens, preteens, nentary aged children will be involved in a ag course teaching life skills with regard to nce. These subjects will include conservation	Chief Scientist's Recommendary This proposal is a good idea init community impacted by the oil subsprojects of this type such as subsistence beliefs youth have not been funded by Council in the past. This project	iated by a pill. However pirit camps, and practicy the Trusto	, which ces to	Executive Di Do not fund. received requ other projects harvesting an have been for State's EVOS	Although th ests in the that would d related sk und not to b	e Trustee (past for spi teach tradi tills to yout e legally po	Council ha irit camps itional met h, such pre ermissible	s and hods of ojects The	

appropriate for submittal through the State's EVOS criminal settlement subsistence grant program. Do not fund.

administered by the Alaska Department of Community and Regional Affairs, have been awarded for this purpose.

of resources, hunting and gathering techniques,

activities, and traditional knowledge regarding

survival skills in the wilderness, safety in outdoor

gathering. The program will take place in the vicinity of Port Graham. EVOS funds will assist in bringing specialized speakers to the program to talk about kayak safety and life skills, as well as other aspects of subsistence. Additionally, the funds will go toward the acquisition of supplies such as camping gear, cooking gear, educational supplies, and other

miscellaneous items. Port Graham Village Council will obtain the other needed funding from other sources.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99497	Chenega Bay Subsistence Processing Building/Biosampling Facility	J. Christensen/Chenega Bay IRA Council	ADFG	New 1st yr. 1 yr. projec	\$64.2	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project will fund the construction of a Subsistence Processing and Biosampling Facility in Chenega Bay. The building will provide shelter for local subsistence harvesters to process game meat. Additionally, the building will be used by the local participants in the Alaska Native Harbor Seal Commission's biosampling program (Project /244). Biosampling will take place within the building, protecting the biosamplers from the harsh elements of Prince William Sound. The building will also be used to educate the youth of Chenega Bay on traditional methods of harvesting. The oil spill has created a generation without the knowledge of how to harvest subsistence resources. Scarcity, fear of contamination, and other factors have limited the ability for harvesters to take youth out. With this building, local harvesters will have the ability to hold classes and other similar activities.

Chief Scientist's Recommendation

A policy decision needs to be made on whether this proposal would be eligible for funding with EVOS civil settlement funds. Similar facilities have been constructed in other spill-area communities with the State's EVOS criminal settlement funds. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. Although the Trustee Council has received requests in the past for facility construction in spill-region villages, such projects have been found not to be legally permissible. The State's EVOS criminal fund subsistence grants, administered by the Alaska Department of Community and Regional Affairs, have been awarded for this purpose.

Native Village of Eyak Subsistence 99502 Meeting Hall

Project Abstract

This project will add meeting space to the Native Village of Eyak's new building, which is to be constructed during FY 99. This will allow subsistence meetings, both local and regional, to be held at Eyak/Cordova. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.1

B. Henrichs/Native Village of Eyak DOI

New 1st yr. 1 yr. project \$400.0

\$0.0

\$0.0

\$0.0

\$0.0

Chief Scientist's Recommendation This proposal, which would partially fund a meeting hall for the Native Village of Eyak, is

probably not within the funding purview of the Trustee Council Do not fund.

<u>Executive Director's Preliminary Recommendation</u>
Do not fund. Although the Trustee Council has received requests in the past for facility construction in spill-region villages, such projects have been found not to be legally permissible.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99503	Restoration of Orca Inlet	B. Henrichs	DOI	New 1st yr. 4 yr. proj	\$250.0 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

When many of the Native Village of Eyak elders were young, Orca Bay was a rich ecosystem. There were a million pounds of dungeness crab harvested annually and Eyak/Cordova was known as the "Razor Clam Capitol of the World." There were many other species of clams within walking distance of the local harbor. Many residents caught halibut in the bay. However, by 1998, things have changed in Orca Inlet. There are a few sea otters in the bay, but most other sea life has died. The 1964 earthquake helped kill the bay. The dumping of millions of pounds of ground up fish waste has smothered the bay. Research needs to be done and then action taken to restore Orca Bay to what it was when we were children. Bays, lakes and rivers are being restored around the United States. It is time that Orca Bay is restored. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

Chief Scientist's Recommendation

Eyak elders have seen many changes in Orca Inlet, including the reduction of razor clam and crab populations and the return of large numbers of sea otters. There are many reasons for these changes, including the 1964 earthquake, but the oil spill probably had little or no role in these changes. To the extent that the changes stem from such events as the earthquake, they are essentialy irreversible. The effects of the disposal of large volumes of fish waste in Orca Inlet is a possible concern, and the proposers may want to explore these concerns with the Alaska Department of Environmental Conservation and the US Environmental Protection Agency. I cannot recommend funding at this time. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This proposal is somewhat vague and
very expensive, and may be beyond the purview of
the Trustee Council. However, like Project 99333, it
raises a good question in regard to the effects of fish
waste on the Orca Inlet ecosystem. Restoration
Office staff should assist the proposer in obtaining
information from other sources (U.S. Environmental
Protection Agency, Alaska Department of
Environmental Conservation, and others) about this
issue.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99507	Nuchek Subsistence Camp	B. Henrichs/Native Village of Eyak	DOI	New 1st yr. 4 yr. projed	\$250.0 ct	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

With the many battles over subsistence raging, there needs to be a way and place to pass the traditional subsistence way of life on to future generations. A perfect location would be Nuchek, located near Hinchinbrook Entrance on Hinchinbrook Island. This was the ancient home of many of the Aleuts in Alaska. Chugach Alaska Corporation has operated spirit camps at this location. These have gone over very well. These facilities could be used for "subsistence camps," where the subsistence way of life could be passed on to the younger generations. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

Chief Scientist's Recommendation

This proposal involves a good idea which has potential for reinvigorating subsistence in the Prince William Sound/lower Cook Inlet region. However, proposals of this type have not been funded by the Trustee Council in the past because of questions about their legal permissibility under the terms of the settlement agreement. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. Although the Trustee Council has
received requests in the past for spirit camps and
other projects that would teach traditional methods of
harvesting and related skills to youth, such projects
have been found not to be legally permissible. The
State's EVOS criminal fund subsistence grants,
administered by the Alaska Department of
Community and Regional Affairs, have been awarded
for this purpose. In fact, the Nuchek Spirit Camp was
established in 1995 with a criminal fund subsistence
grant.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99508	Copper River Salmon Run Data Improvement Project	B. Henrichs/Native Village of Eyak	DOI	New 1st yr. 4 yr. proj	\$436.4 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract oct will protect and enhance the salmon runs pper River to replace the lost subsistence	Chief Scientist's Recommendati This work would address allocatio the Copper River basin and is outs	n issues v		Executive Dia Do not fund. Illocation of C	This propos	al would a	dress the	<u> </u>

resources in Prince William Sound. The project will install modern automated run monitoring and data collection equipment on the Copper River tributaries and will provide input into the Fisheries Management Plan using data collected over a five year period. The Copper River is the remaining strong subsistence resource that people have available since the spill took away many of the other subsistence areas. The Copper River fishery is at risk because of a shift in resource use from subsistence and commercial fishing to urban sport and personal use fishing. Sufficient data is not available from the Miles Lake Sonar at the mouth of the river to monitor new pressures on the fishery in the upriver tributaries. [NOTE: This proposal was submitted as an idea; if recommended for funding, a Detailed Project Description and detailed budget will need to be prepared.]

area. Do not fund.

are under the purview of various resource management agencies and are not appropriate for the Trustee Council to address.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99521	Lower Cook Inlet Salmon Ecology Pilot Study	P. McCollum/Nanwalek	ADFG	New	\$112.8	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

Improving existing knowledge of the survival mechanism of pink and sockeye salmon in southeastern lower Cook Inlet is the main goal of this project. The pilot study will sample outmigrating salmon smolts for growth, marks (coded wire tags), stomach contents (for prey species identification) and timing (days since release or outmigration). By sampling these variables the study will document the growth rate and outmigration timing of these two important salmon species in the spring of 1998. Opportunistic sampling of smolts will occur when feasible with hopes of learning important staging areas and preferred beach habitat for both species. Plankton and sea surface temperature records will be collected for possible future correlation with observed growth. Both pink and sockeye salmon are essential components of the subsistence and commercial fisheries in the Port Graham and English Bay drainage.

Chief Scientist's Recommendation

The goals of this proposal include a literature review of ecological factors that control marine survival in pink and sockeye salmon in Alaska and Canada, a characterization of preferred marine habitat, and documentation of growth rates of the two species in portions of lower Cook Inlet. The proposal does not identify the principal investigator and their qualifications. A sampling plan for the field work is not provided, nor is there any detail on how the very large literature on Pacific salmon will be analyzed and synthesized. The Trustee Council has invested substantially in studies of juvenile salmon marine survival through the SEA project (/320). This proposal does not show a link to SEA and other related projects. Do not fund.

Executive Director's Preliminary Recommendation

Do not fund based on technical review.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Reduction	of Marine Pollution				\$3,082.9	\$1,896.8	\$0.0	\$0.0	\$1,896.8
99304	Kodiak Island Borough Master Waste Mangement Plan	J. Selby/Kodiak Island Borough	ADEC	Cont'd 2nd yr. 2 yr. proj		\$1,846.8	\$0.0	\$0.0	\$1,846.8

Project Abstract

This project will address marine pollution derived from land-based sources and waste management practices of the remote communities of Kodiak Island. A master waste management plan developed in Phase I (Project 97304) addressed community-based sources of marine pollution and resulted in four recommended initiatives. Phase II EVOS funding will provide a portion of the funding needed to implement the recommendation selected by the communities as the highest priority -- Systems Development: Fixing What is There. This comprehensive initiative of systems development will provide capital improvements to existing waste management systems and will promote local responsibility.

Chief Scientist's Recommendation

As a result of an initial planning effort sponsored by the Trustee Council, the Kodiak Borough and seven Kodiak Island communities have put together what seems like an effective plan for reduction of marine pollution through improved handling and disposal of community wastes, such as oil. This proposal now seeks funds to implement aspects of the plan. There is significant cost sharing from the Kodiak Island Native Association and others, and a similar project has been planned and implemented in Prince William Sound. The amount of funds requested is substantial, and it is my understanding this would be an appropriation separate from the FY 99 Work Plan. I recommend this project be funded after a qualified engineer reviews a more detailed, revised proposal.

Fund contingent on submittal of a more complete Detailed Project Description and budget and review by a qualified engineer. This project will upgrade and improve land fills, disposal sites and solid waste management, construct and install used oil and hazardous waste storage and disposal facilities and equipment, and provide for systems maintenance and repairs for the seven villages on Kodiak Island. Trustee Council funds will be used only for those activities that are not legal requirements of the Kodiak Island Borough or the city governments. The project has the potential to significantly improve water quality in the coastal waters near these villages. However, before the proposal can be evaluated.

Executive Director's Preliminary Recommendation

and personnel needed for routine systems inspections and specific improvements to landfills. [NOTE: This project will be funded outside of the regular FY 99 work plan of research, monitoring, and general restoration projects.]

greater detail needs to be provided, such as the

types of specialized technical services needed, the

tools and parts needed, and the purpose, frequency

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99391	Cook Inlet/Prince William Sound Information Management/Monitoring System	J. Hock/ADEC, C. Fries/ADNR	ADEC	New 1st yr. 2 yr. proj	\$675.5 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommenda	ation		Executive Dir	rector's Pre	liminary Re	commend	lation

This project will develop an integrated data base containing digital environmental and spatial data for the Cook Inlet and Prince William Sound watersheds. The system will facilitate access to data from a wide variety of sources about the resources and services injured by the spill as well as base data sets important to understanding the environment of the watersheds. This database will support monitoring, management, and restoration. Water quality data sets derived from the two watersheds will provide the cornerstone of this system thereby facilitating monitoring of both baseline parameters and chronic sources of marine pollution. From both public policy and natural resources management perspectives, this project will protect the governments' investment in restoration by making information derived from restoration activities and water quality monitoring programs available for management of the watersheds in a manner that will promote the recovery of the injured resources and services

Chief Scientist's Recommendation

No recommendation from the Chief Scientist due to possible conflict of interest with indirectly related non-EVOS work for which the Chief Scientist is on contract.

Executive Director's Preliminary Recommendation [NOTE: Proposal not reviewed by Chief Scientist. The following reflects comments of individual peer reviewers.] Do not fund as proposed. This project would compile a database to facilitate monitoring of water quality and chronic marine pollution. It would make an indirect contribution to the reduction of marine pollution, while other EVOS projects have reduced marine pollution directly (e.g., Sound Waste Management Project/115). Methods described in the proposal lack detail--it is not clear how the data sets to be compiled would be used (e.g., in permitting decisions), how use of the data would benefit injured resources, and how the information would be accessed (e.g., through requests to an agency or publicly over the internet?). Technical reviewers also note that managers and public will benefit most from information that is produced from analysis and interpretation of data, rather than data sets themselves. Appears to be stakeholder interest in project, but unclear whether their specific needs have been assessed and addressed, and whether all appropriate agencies have been involved (e.g., Minerals Management Service and Environmental Protection Agency). Project personnel have extensive technical expertise, but unclear whether there is sufficient experience/ authority to lead what would be a complex effort, organizationally and scientifically. Proposal is expensive and there does not appear to be cost-sharing by beneficiaries (e.g., industry). Finally, some aspects of this proposal could be considered normal agency management; there is no mention of cost-sharing contributions by relevant agencies.

EV04

EVOG

6/10/98

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99415	Prince William Sound/Kodiak Waste Management Community Awareness Training Video and Manual	K. Merrell/PWSEDC, K. Hartwell/Wild North Productions	ADEC	New 1st yr. 1 yr. pro	\$81.6 eject	\$0.0	\$0.0	\$0.0	\$0.0
video to fa Sound Wa the Kodial Managem awarenes make use the new d waste ma Akhiok, Ka	Project Abstract act will develop a community awareness acilitate implementation of the Prince William aste Management Plan (Project /115) and k Island Borough Master Waste aent Plan (Project /304). The need for an as and training program to help villagers of new waste management procedures and rop-off sites is a logical extension of the nagement plans. Affected villages include arluk, Larsen Bay, Old Harbor, Ouzinkie, a, Chiniak, Chenega Bay, and Tatitlek.	Chief Scientist's Recommendat Training facility operators and end waste management facilities are of restoration objectives are to be an However, it is not clear that a vide are the most effective means of p needed training and encouragem fund.	couraging essential it divanced. eo and ma roviding	f nual ot	Executive Di Do not fund. I Waste Manag routine operat Prince William operate and m oil equipment regard to the I (Project /304), has not yet be	Public informement Plantions cost. To Sound have the funded by the this proposed to the propos	mation abo (Project /1 The cities and recommitted EVOS states and Waste Market In the Incomplete In	ut the Sou 15) should nd villages ed themse ions and t Council. \ lanageme	ind d be a s in elves to used With ent Plan

DRAFT

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99514	Marine Pollution Reduction for Nanwalek and Port Graham	E. McMullen/Port Graham Village Council	ADEC	New 1st yr. 1 yr. projed	\$278.1 ct	\$50.0		\$0.0	\$50.0

Project Abstract

This project will help prevent marine pollution that is generated from land-based sources within the Port Graham/Nanwalek communities. Following the model of the Sound Waste Management Plan (Project /115) and the Kodiak Island Waste Management Plan (Project /304), the Port Graham/Nanwalek implementation phase of Environmental Operation Stations would be a logical step within these communities. The construction will accomplish two main objectives: 1) improvement of the overall management of solid and oily waste; and 2) creation of a comprehensive used-oil management system in the communities.

Chief Scientist's Recommendation This proposal would extend proven waste management strategies to the outer Kenai Peninsula communities. I think a qualified engineer should review a more detailed proposal, including a discussion of operator training. Fund contingent.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of a revised Detailed Project Description and budget that reduce the scope of the FY 99 effort to only planning and engineering subject to the following conditions: (a) inclusion of all three spill-affected vilages on the southern Kenai Peninsula, that is, Seldovia as well as Port Graham and Nanwalek, (b) collaboration between the Alaska Department of Environmental Conservation and the affected villages in preparation of the revised Detailed Project Description and budget, and (c) reference to the Sound Waste Management Plan (Project /115) and Kodiak Island Waste Management Plan (Project /304) for guidance in approaching used oil management. The Trustee Council may consider a proposal to contribute to implementation of the project after evaluation of the planning and engineering report. This project is designed to improve handling of used oil in spill-affected villages on the southern Kenai Peninsula. The purpose of the planning and engineering effort will be to document the nature of the problem and customize solutions to the needs of each community and to their commitment to ongoing maintenance.

A1 ----

Proj.No.	Project Title	Proposer	Lead Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99515	Lower Kenai Peninsula Regional Chronic Marine Oil Pollution Project	M. Mayo/TLI Systems, Inc.	ADEC	New 1st yr. 2 yr. projec	\$200.9 t	\$0.0	\$0.0	\$0.0	\$0.0
	D : 141 / /	01:10:11		_					

Project Abstract

This two-year community pilot planning and implementation project will reduce, control, and prevent chronic marine oil pollution, such as discharges of oily bilge water or pollution from other oil uses discharging into the coastal areas. Focus areas include Seward, Port Graham, Nanwalek, and Seldovia, with participation by Homer and Kenai. Control options include collection facilities including a collection boat, separators, filters, and oil burners. The purpose is to ensure that marine areas of the lower Kenai Peninsula affected by the oil spill are not further weakened by continuing oil contamination, and to improve and protect the marine environment of the Alaska SeaLife Center.

Chief Scientist's Recommendation
This proposal would apply proven waste management planning efforts to the lower Kenai Peninsula area. This proposal does not appear to have been extensively coordinated with the local communities (significant overlap with Project 99514 is noted). Budget detail is lacking. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. Although the concepts presented in the
proposal may have merit, there is no evidence that
the proposal has been well coordinated with affected
communities and budget detail is lacking.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Habitat Impro	ovement				\$2,004.5	\$457.7	\$0.0	\$0.0	\$457.7
99180-CLO	Kenai Habitat Restoration and Recreation Enhancement	A. Weiner/ADNR, K. Cromery/USFS	ADNR	Cont'd 4th yr. 4 yr. pro	\$330.1 ect	\$299.6	\$0.0	\$0.0	\$299.6

Project Abstract

Adverse impacts to the banks of the Kenai River total approximately 19 miles of the river's 166-mile shoreline, including 5.4 river miles of public land. Riparian habitats have been impacted by trampling, vegetation loss and structural development. The project's objectives are to restore injured fish habitat, protect fish and wildlife habitat, enhance and direct recreation, and preserve the values and biophysical functions that the riparian habitat contributes to the watershed. Restoration/enhancement techniques will include revegetation, streambank restoration, elevated boardwalks, floating docks, access stairs, fencing, signs, and educational interpretive displays.

Chief Scientist's Recommendation

This proposal would complete the fourth and final year of habitat restoration on public lands along the Kenai River. If funded, the Trustee Council will have invested nearly \$2 million in Kenai River restoration, which, in combination with the millions spent on habitat acquisitions and sockeye salmon research and management, represent a major contribution to Kenai River commercial, recreational, and subsistence fisheries. I support funding this final year of work in FY 99 and look forward to seeing the results of monitoring efforts over the longer term. Fund.

Executive Director's Preliminary Recommendation Fund at expected level (less \$7,000 to reflect US Forest Service's reduced request), contingent on submittal and review of a revised budget and satisfactory completion of FY 98 work. This project will complete the Trustee Council's contribution to habitat restoration along the Kenai River by providing funds to finish the Slikok Creek and Russian River projects, which received partial funding from the Council in FY 98. Spending of the FY 98 funds has not yet been authorized, however, pending compliance with three contingencies outlined by the Council in the FY 98 Work Plan (endorsement of the project design by the Kenai River Advisory Board. submittal of a detailed budget, and affirmation by the Alaska Department of Fish and Game that the project will improve fish habitat). In general, the habitat restoration efforts along the Kenai River will benefit sockeye salmon and other fish species of commercial and recreational importance.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99230	Valdez Duck Flats Conceptual Management Plan	J. Isaacs/PWSEDC	ADNR	Cont'd 2nd yr. 1 yr. projec	\$69.6 t	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

The Valdez Duck Flats Conceptual Management Plan is being completed in FY 98 (Project 97230). Project continuation in FY 99 is dependent on successful acquisition of parcels of property from the University of Alaska and a private owner. However, it is appropriate to initiate design of a monitoring and public information program related to the Duck Flats, sensitivity to impact, and relationship to resources injured in the oil spill. The Prince William Sound Economic Development Council will work with the cooperating agency group, the City of Valdez, the Valdez School district and the Prince William Sound Community College in developing a suitable monitoring and education program.

Chief Scientist's Recommendation

This project would explore development of a baseline monitoring project on the Valdez Duck Flats and also further develop concepts related to public education about the value of the Duck Flats as sensitive habitat for EVOS-injured fish and wildlife. The proposal contains some good and worthwhile ideas, but the substance of the proposal is not compelling. In addition, acquisition of key parcels on the Duck Flats has not been brought to closure. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. The Trustee Council may consider proposals to implement the concept plan for the Valdez Duck Flats (Project 97230) when and if the small parcels on the Duck Flats have been acquired and the City of Valdez has endorsed the plan and submitted a comprehensive package that shows cost-sharing and plans for long-term operation and maintenance.

99314

Homer Mariner Park Habitat Assessment and Restoration Design

J. Cushing/City of Homer

ADNR New 1st yr.

\$102.1

\$99.5

\$0.0

Project Abstract

In its present state, Mariner Park is a highly stressed marine habitat in decline. The area is experiencing a dramatic reduction in marine biota and shorebird populations while incompatible and environmentally destructive human uses flourish. From the results of a comprehensive feasibility study that includes botanical, biological, and hydrological field studies coupled to community information it is possible to develop a comprehensive habitat restoration and enhancement plan. This plan will establish the optimal hands-on restoration program to increase and diversify the intertidal fauna, which, in turn, will benefit migrating shorebirds and promote recreationally compatible use of the area by residents and tourists.

\$0.0

\$99.5

1 yr. project

Chief Scientist's Recommendation

This is a community-based general restoration project for a basic environmental assessment and feasibility study for the restoration of intertidal habitats in Mariner Park, at the base of Homer Spit. This may be one of the few opportunities in the spill area for direct restoration of intertidal resources, if this project is indeed feasible and ultimately carried out. Fund.

Executive Director's Preliminary Recommendation Fund contingent on submittal and review of a slightly reduced budget. This project will produce a feasibility study and environmental review for restoration of an intertidal area damaged as a result of spill response efforts. Funding of the study phase of the project is not a commitment for Trustee Council funding to implement the project.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99339	Western Prince William Sound Human Use and Wildlife Disturbance Model	K. Murphy, L. Suring/USFS	USFS	Cont'd 2nd yr. 2 yr. projec	\$70.2	\$58.6	\$0.0	\$0.0	\$58.6

Project Abstract

This project will use geographic information system (GIS) techniques to describe current human-use patterns in western Prince William Sound and to model potential changes in those use patterns as a result of additional development. Maps of present and projected human-use patterns will be incorporated with maps of the distribution of injured resources. This will provide a basis to identify areas where there may be conflicts between human use and wildlife concentrations resulting in disturbance. Disturbance of injured wildlife may result in decreased productivity exacerbating the effects of the oil spill and prolonging the time to recover. Identification of potential areas of disturbance will allow development of recommended management practices that may eliminate or minimize the negative effects of increasing human use. All injured resources and subsistence species will be addressed in a general approach but specific management recommendations will be developed for harbor seal, pigeon quillemot and cutthroat trout.

Chief Scientist's Recommendation

This proposal is for the second and final year of a project to model human uses and wildlife disturbance in western Prince William Sound and to develop corresponding management recommendations for a suite of EVOS-injured species. This work is important, both because of the relevance to EVOS recovery and because this pilot effort may have applicability elsewhere. There may be a chance for modest savings, because submission of both annual and final reports in FY 99 is unnecessary. Fund.

Executive Director's Preliminary Recommendation

Fund contingent on submittal and review of a reduced budget which reflects the fact that the Trustee Council's report writing procedures do not require an annual report in the year a final report is being written. This project will develop and test in western Prince William Sound a model for projecting future impacts of human use on resources injured by the oil spill. Work proposed for FY 99 includes completion of the model and a final report.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99387	South Spruce Street Beach Parking	K. Kornelis/City of Kenai	ADFG	New 1st yr. 1 yr. proj	\$165.9 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommenda	tion		Evocutive Di	ractorie Dra	liminany Re	commenc	lation

Project Abstract

The Alaska Department of Fish and Game has opened a seasonal dip net fishery at the mouth of the Kenai River that thousands of "dip netters" from all over the state take advantage of. This project will provide proper access in a way that will not damage the area or cause user problems to the dip net fishery at the mouth of the Kenai River and will relieve the heavy fishing pressure upstream. This project could be considered Phase II of the Kenai Beach Dunes Protection Project (/180). It will provide additional parking and reroute an existing trail to this parking area. Adjacent damaged wetlands will be repaired and barriers placed to help protect the wetlands in the future.

Chief Scientist's Recommendation

This project aims to restore Kenai River wetlands that are being harmed as a result of inadequate parking and trails in relation to a popular dipnet fishery. There is no mention of having discussed this problem and possible solutions, including curtailing or closing the fishery, with the Alaska Department of Fish and Game, nor any offer of cost sharing. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. Although this project has the potential
to protect habitat from further damage, there is no
indication that other, less costly solutions have been
explored. In addition, although the type of work
proposed is consistent with projects previously
funded, I cannot recommend additional investment in
new Kenai River projects given the Trustee Council's
very substantial investment in sockeye research and
management, habitat acquisition, and habitat
restoration.

99388

Kenai River Mouth South Side Access and Parking

K. Kornelis/City of Kenai

ADFG New 1st yr.

1 yr. project

\$828.5

FYQQ

Now or

FYQQ

FYNN

FY01

Total

\$0.0

\$0.0

\$0.0

\$0.0

Project Abstract

The Alaska Department of Fish and Game has opened a seasonal dip net fishery at the mouth of the Kenai River that thousands of "dip netters" from all over the state take advantage of. This project will provide proper access in a way that will not damage the area or cause user problems to the dip net fishery at the mouth on the south side of the Kenai River. It will relieve the heavy fishing pressure upstream. This project will build a road with a parking lot at the end near the south side of the Kenai River mouth. "Dip netters" are presently accessing the area with 4 x 4 vehicles along the beach, damaging the environment and often crossing private property.

Chief Scientist's Recommendation

This project aims to restore Kenai River wetlands that are being harmed as a result of inadequate parking and trails in relation to a popular dipnet fishery. There is no mention of having discussed this problem and possible solutions, including curtailing or closing the fishery, with the Alaska Department of Fish and Game, nor any offer of cost sharing. The type of work is consistent with other habitat restoration work sponsored by the Trustee Council, although I'm not aware of other road building projects. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. Although this project has the potential
to protect habitat from further damage, there is no
indication that other, less costly solutions have been
explored. In addition, although the type of work
proposed is consistent with projects previously
funded, I cannot recommend additional investment in
new Kenai River projects given the Trustee Council's
very substantial investment in sockeye research and
management, habitat acquisition, and habitat
restoration.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	1 otal FY99-02
99399	Eastern Prince William Sound Human Use and Wildlife Disturbance Model	K. Murphy, L. Suring/USFS	USFS	New 1st yr. 3 yr. projec	\$38.6 et	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project is an expansion of the human-use and wildlife disturbance model being developed for western Prince William Sound (Project /339). The project will use geographic information system (GIS) techniques to describe current human-use patterns in the eastern sound and to model potential changes in those use patterns as a result of additional development. Maps of present and projected human-use patterns will be incorporated with maps of the distribution of injured resources. This will provide a basis to identify areas where there may be conflicts between human use and wildlife concentrations. Disturbance of injured wildlife may result in decreased productivity exacerbating the effects of the spill and prolonging recovery. All injured resources and subsistence species will be addressed in a general approach but specific management recommendations will be developed for harbor seal, pigeon guillemot and cutthroat trout.

Chief Scientist's Recommendation Expansion of the work in western Prince William Sound (Project \339) to the eastern sound is premature without there being a completed, peer reviewed product from the current project. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. The Trustee Council may consider
proposals to expand or apply the human use model
being developed under Project /339 after the model
and final report have been completed and peer
reviewed.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99437	Selecting and Propagating Local Spruce Resistant to the Tree Killing Spruce Beetle	J. Alden/UAF	ADFG	New 1st yr. 2 yr. pro	\$63.6 oject	\$0.0	\$0.0	\$0.0	\$0.0
resistant tro long term s relationship	Project Abstract It will select and propagate spruce beetle lees in an effort to secure and maintain a letable balance in the Picea - spruce beetle letable. [NOTE: The proposal was not submitted letah; the cost and duration estimates are	Chief Scientist's Recommendate Although most bark beetle impact coastal forests of prime concerning standpoint, the current infestation effect on some injured species (emurrelets). This project aims to be resistant spruce trees, which can reforest infested areas. Any beneficially and I question the likelihood that project will lead to a cost effective would result in reforestation on the landscape scale affected by the befund.	/OS an de de o S ears), m this that ge,	Executive Director's Preliminary Recommendation Do not fund. The Chief Scientist has raised significant concerns about the cost-effectiveness of the proposal given the limited effect of spruce bark beetle infestation on species injured by the oil spill.					
99495	Soldotna Swiftwater Park Recreational Access and Habitat Restoration	S. Bonebrake, D. Bower/City of Soldotna	ADNR	New 1st yr. 1 yr. pro	\$252.4 Dject	\$0.0	, \$0.0	\$0.0	\$0.0
"volunteer" provide add designated Kenai Rive the boat lat Finally, foo damaged b protected t	Project Abstract It will renovate and expand the existing I boardwalk which was installed in 1995 to I ditional protected pedestrian access to I fishing and viewing stations along the Ir. It will also provide a multi-use platform at unch for boat staging and other uses. It traffic will be controlled and previously bank areas will be stabilized, restored and using a variety of methods intended to naturally functioning riparian zone.	Chief Scientist's Recommendar This is a well thought out and well proposal that is consistent with the funded elsewhere in the Kenai was Trustee Council. While the proposithat closure of the fishery is not fee other opportunities for mitigation affails to address the larger question one goes to accommodate more of the Kenai River. Do not fund.	Il presented to the type of vertices of the type of vertices of the type of type of the type of the type of the type of the type of the type of the type of the type of the type of the type of the type of ty	vork y the ite d , this far	Executive Dir Do not fund. A to protect habi purpose is to a Kenai River ar restoration of i	Ithough this tat from fur accommoda ad therefore	s project ha ther damaç ate addition would cor	as the pote ge, its prim al users o	ential nary of the

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99496	Soldotna Centennial Park Uplands Access Trail	S. Bonebrake, D. Bower/City of Soldotna	ADFG	New 1st yr. 1 yr. projec	\$83.5 et	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

The Centennial Park Upland Trail project was first proposed as part of the habitat and access improvements project completed in 1997 (Project /180). That project provided habitat restoration, elevated light penetrating walkway at the top of the park's upstream cutbank area, and the three sets of stairs accessing the river bed for angler use. The Upland Trail Project will provide a safe, durable path for campers and day use visitors to reach the bank-top walkway, reducing trampling of the surrounding area and allowing natural revegetation of the disturbed areas.

Chief Scientist's Recommendation
This is a well thought out and well presented proposal that is consistent with the type of work funded previously in the Kenai watershed by the Trustee Council. While the proposers indicate that closure of the fishery is not feasible and other opportunities for mitigation are limited, this fails to address the larger questions of how far one goes to accommodate more and more users of the Kenai River. Do not fund.

Executive Director's Preliminary Recommendation
Do not fund. This request duplicates funding
(\$45,000) that the Trustee Council provided for the
Centennial Park Uplands Trail through Project 98180.
Construction is scheduled for late summer/early fall
1998.

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restoration projects.]

Habitat Pi	t Protection				\$756.7	\$756.7	\$756.7
99126	Habitat Protection and Acquisition Support	C. Fries/ADNR, D. Gibbons/USFS, G. Elison/DOI	ADNR	Cont'd	\$756.7	\$756.7	\$756.7
Trustee protection reports, material reviews	Project Abstract bject provides negotiation support to the Council in order to reach closure on habitat on priorities. This support includes title appraisals, on-site inspections, hazardous ls surveys, land surveys, timber cruises and , and other services necessary for the sful completion of habitat protection tions.	Chief Scientist's Recommenda Proposal not reviewed.	<u>tion</u>		Fund continged Description and Description and FY 99. This purpose protection protection protection protection and protection protec	ent on (a) submittand (b) review of Dend budget based oproject provides subgram, including necessing costs, etc. And for this purpose and in FY 98; \$756,7 FY 99. [NOTE: Fithrough the Truste	n work expected in pport for the habitat egotiation staff, total of \$1,282,600 in FY 97; \$851,400 700 has been unds for this project e Council's habitat the regular FY 99

6/10/98

Habitat Bratastian

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Recreation	and Tourism				\$687.9	\$0.0	\$0.0	\$0.0	\$0.0
99517	Prince William Sound Regional Cultural and Eco-Tourism Center	F. Irick/Kueuit Foundation, Inc.	USFS	New 1st yr. 3 yr. proje	\$687.9 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

This project will outline an approach to restore recreation and tourism usage of the wilderness and traditional Native culture in the Prince William Sound region. This will be done by encouraging visitors to come see and appreciate (1) the remaining pristine beauty of the sound and the Native cultures of the area, (2) the history of the oil spill and initial assessment and cleanup activity as well as longer-term resource restoration efforts and the impact of these on all the resources of the area, including the people and traditional lifestyles, and (3) the importance of continuing good stewardship of the natural resources of the area under the planning and control of its residents.

Chief Scientist's Recommendation

This proposal, which would attempt to restore recreation and tourism through the promotion of tourism and traditional Alaska Native culture, has a weak link to the Trustee Council's restoration objectives. In addition, it is difficult to assess how the project would be carried out as it lacks concrete objectives. The necessary collaboration with Native communities and groups is not demonstrated in the proposal. Do not fund.

Executive Director's Preliminary Recommendation Do not fund. This project has a weak link to restoration objectives for recreation and tourism. Furthermore, the necessary collaboration with Native communities in the spill area is not demonstrated in the proposal.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Ecosysten	n Synthesis			\$1,200.9	\$587.8	\$35.0	\$0.0	\$622.8	
99278	Development of an Ecological Characterization and Site Profile for Kachemak Bay/Lower Cook Inlet	G. Seaman/ADFG	ADFG	New 1st yr. 2 yr. proj	\$105.2 ject	\$60.0	\$35.0	\$0.0	\$95.0

Project Abstract

This project will develop an ecological characterization and site profile to collect, synthesize, analyze, and document available physical, biological, and human or socioeconomic information on the Kachemak Bay/Lower Cook Inlet area. The project will result in the development of a database management system with products produced in electronic format and on paper. Project components include (1) an ecosystem narrative description; (2) a spatial data component using a Geographic Information System (GIS); and (3) an annotated bibliography and research summary/tracking system. The products will be used to (1) identify future restoration opportunities, (2) assist in the use and protection of land, (3) plan for a possible long-term ecological monitoring and research program in the Northern Gulf of Alaska, and (4) assist in agency management and planning for the Lower Cook Inlet area.

Chief Scientist's Recommendation

This proposal is a significant improvement over the version submitted last year, and the principal investigators have worked hard to address the concerns previously raised. The project will be most useful to make local resource management decisions, and the value of the digital products, aside from of the GIS, is not established well in the proposal. It does seem likely that a watershed management program for Kachemak Bay will improve our ability to sustain fisheries and wildlife in the region, and thus enhance resources and services injured by the spill. The proposal demonstrates excellent cost sharing with the National Oceanic and Atmospheric Administration, which is appropriate given the objectives of the project. Objectives 2 (establishing a GIS-based spatial data set) and 3 (production of an annotated bibliography) appear to be most valuable and should be funded. Fund contingent on receipt and review of a reduced budget focusing on objectives 2 and 3.

<u>Executive Director's Preliminary Recommendation</u> Fund, contingent on submittal and review of a

Fund, contingent on submittal and review of a revised budget that limits the Trustee Council contribution to objectives 2 and 3, the GIS-based spatial data set and the annotated bibliography. The Kachemak Bay watershed management program being developed through the National Estuarine Research Reserve process, of which these products are a part, will improve the ability to sustain fish and wildlife resources in the region, and thus enhance resources and services injured by the oil spill.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99300	Synthesis of the Scientific Findings from the Exxon Valdez Oil Spill Restoration Program	R. Spies/Applied Marine Sciences	ADNR	Cont'd 3rd yr. 3 yr. proj	\$80.3 ect	\$80.3	\$0.0	\$0.0	\$80.3
provided ecology of single information of synthesizes, the overale goal of the on such a anniversale build the first spill area. Work on secosystem	Project Abstract a sponsored by the Trustee Council has an astonishing amount of information on the of the spill area and represents the largest usion of data on natural resources in the Gulf of Alaska. There is an urgent need to e the information across projects to realize rum benefit to the public and management and to provide a cogent demonstration of ll value of the restoration program. It is the is project to have made substantial progress a synthesis in time for the 10-year ary of the oil spill, and to use this synthesis to foundation for long-term monitoring in the The specific objectives involve coordinating synthesis products, facilitating the efforts to and apply food-web models of the spill area m, and developing a long-term plan for and monitoring in the spill area.	Chief Scientist's Recommendation Proposal not reviewed.	<u>on</u>	F v iii r c iii f F a a	Executive Direction of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control consideration of the control consideration of the control of the control consideration of the control of the control consideration of the control of the control consideration of the control of the control control of the control control of the control control of the contr	oject will co cipal investi elopment of eggaso) and are prepar intertidal co species. To ment of proterm resear forts are time ion prograr ary year, but lers recove in the closin	ntinue the gators who an ecologid with longing synthe mmunities his project eliminary croh and modely and nem enters that also as thry needs a	Chief Scie o are provi- cal synthe -time peer sis manus and comn also will si oncepts for intoring pr cessary, n e spill's ne Trustee nd enhance	intist's ding sis cripts nercially upport or a cogram. oot only

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Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99330-BAA	Mass-Balance Models of Trophic Fluxes in EVOS-Impacted Areas	D. Pauly/UBC, S. Pimm/U. Tenn	NOAA	Cont'd 2nd yr. 2 yr. projed	\$185.6	\$165.2	\$0.0	\$0.0	\$165.2

Project Abstract

This project will construct, validate, and disseminate whole food-web models of Prince William Sound and adjacent marine areas affected by the oil spill. These mass-balance models of flows among trophic levels and among ecosystem components are ideally suited to synthesize the extensive information gathered by various research groups since the spill. The second year of this project will consist of three main components: (1) the production of a CD-ROM for the public domain, incorporating an interactive graphic version of the Prince William Sound trophic model developed during year 1 as well as user-friendly databases on the biology and local/traditional knowledge of the marine organisms of Prince William Sound and beyond; (2) the option of a two-day workshop in late January 1999 devoted to constructing an Ecopath model of the Kenai shelf and outer Cook Inlet, attended by researchers from the Gulf of Alaska region, and (3) extended study and shelf model development by project staff.

Chief Scientist's Recommendation

This project is off to a successful start, and it should prove to be a very useful tool for integrating a great deal of data generated by EVOS studies. Application of this tool should allow very worthwhile exploration of possible natural/anthropogenic perturbations that will aid restoration and long-term management. Extension of the project to lower Cook Inlet and Shelikoff Strait is premature, given that there is not yet a first-generation model from Prince William Sound. Fund completion of Prince William Sound component, but defer decision on funds for Cook Inlet/Shelikoff Strait component pending the results of an October 1998 workshop at which results from the Prince William Sound exercise will be presented.

Executive Director's Preliminary Recommendation
Fund completion of Prince William Sound model
contingent on submittal of budget for only this
component; defer decision on initiation of Cook
Inlet/Shelikoff Strait model until results of the Prince
William Sound model are presented in October 1998.
Total budget for both components should not exceed
\$165,200. This project, through the use of food web
modeling techniques, will make an important
contribution to the Trustee Council's effort to
synthesize research and monitoring results from other
Council-funded projects.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99360-BAA	The Exxon Valdez Oil Spill: Guidance for Future Research Activities	C. Elfring/Polar Research Board, NRC	NOAA	New 1st yr. 3 yr. projec	\$194.4 t	\$194.4			\$194.4
				_					

Project Abstract

The Polar Research Board will critique the scope, content, and structure of the draft science plan the Trustee Council is preparing to guide long-term research and monitoring in the northern Gulf of Alaska. The committee formed to accomplish this task will also review the damage assessment and restoration research and monitoring activities sponsored by the Trustee Council to determine if they were of appropriate scope and carried out effectively, as well as consider the extensive literature produced to identify data gaps and conflicting conclusions. The lessons learned from the retrospective review will give guidance on the nature and scope of future activities.

Chief Scientist's Recommendation

A review of the potential EVOS long-term research and monitoring program by the National Research Council is an important opportunity to further establish scientific credibility. However, this proposal needs significant revision prior to implementation. The review would be more effectively conducted jointly by the Board of Environmental Sciences and Toxicology and the Polar Research Board. The precise schedule by which the Trustee Council's potential long-term research and monitoring program would be available for the National Research Council review also needs to be clarified. It must be kept in mind that panel members are volunteers and achieving a restrospective overview of even limited topics within the damage assessment and restoration program will require review of very large quantities of information. Defer decision until a decision is made on the potential EVOS long-term research and monitoring program.

Executive Director's Preliminary Recommendation
Defer decision on funding until Trustee Council
makes its decision on the Restoration Reserve
(probably Fall 1998). If funded, funding would be
contingent on submittal and review of a revised
Detailed Project Description that responds to the
Chief Scientist's concerns. This project would provide
independent scientific review of the potential EVOS
long term research and monitoring program.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99362	Intertidal Invertebrate and Vegetation Communities Associated with NOAA Environmental Sensitive Index (ESI) Mapping Types in Southeast Alaska	D. Rudis/USFWS	DOI	New 1st yr. 1 yr. pro	\$20.1 oject	\$0.0	\$0.0	\$0.0	\$0.0
Administr maps use commonl minimal in ESI maps ground-tr Alaska Data were the ten Education there are type. An communian addition use inforrestribal bioles.	Project Abstract onal Oceanic and Atmospheric ation's Environmental Sensitive Index (ESI) ed during the oil spill were found to y have inaccurate shoreline typing and ntertidal zone biological data. Preparation of s for Southeast Alaska in 1990 included a uthing effort by Department of Interior and epartment of Fish and Game biologists. e collected from 167 sites and 488 plots for SI types in this region. These data have not ated or analyzed. This project will put these a usable format and statistically determine if discreet intertidal communities for each ESI appendix including tables of intertidal ty species assemblages will be developed; onal appendix with subsistence/traditional mation will be developed by a Southeast ogist. These appendices will be available cally and as hard copy.	Chief Scientist's Recomm This proposal raises signific questions related to samplin geographic focus of the proj outside the spill area. Do no	ant technical og and statistics. ect is completel	The y	Executive Dir Do not fund ba FY 99 Invitatio environmental more directly r to synthesize a through the Ex restoration pro project could in the environme information to need to be ava FY 99 as prop Description.	ased on tector requested by sensitive responds to and integration /OS damage ograms. In mprove the intally sensibe useful to allable prior	hnical revied proposals area maps the Truste te informatige assessmaddition, all intertidal correct 95 to FY 99, I	ew. Althous for a	ugh the 199368 Is need lated is ons on nis uld

Proj.No.	Project Title	Proposer .	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99368	Maps Depicting Environmentally Sensitive Areas in Prince William Sound (Summary Seasonal Maps Only)	J. Whitney/NOAA	NOAA	New 1st yr. 1 yr. proj	\$58.7 ect	\$38.0	\$0.0	\$0.0	\$38.0

Project Abstract

A series of seasonal maps depicting environmentally sensitive areas in Prince William Sound will be produced in both hardcopy and digital formats. A previous series was produced in paper format in 1988. However, these maps need to be updated with new information on the distribution, abundance, life history, and sensitivity of the natural resources in Prince William Sound. NOAA proposes to integrate and depict the most current information onto an updated series of maps, produced at a scale of 1:250,000 (previous maps were at 1:333,300). The maps will be produced as posters, folded maps, and a digital product.

Chief Scientist's Recommendation

This proposal to update summary-level "environmental sensitivity index" maps for Prince William Sound responds directly to a request in the FY 99 Invitation. These maps were prepared in 1988, before the oil spill, and preparing an updated version will allow integration of a wealth of EVOS data, which will aid synthesis and application of these data for restoration and management. The agency and principal investigator are experienced with preparation of maps of this type, and the proposal anticipates cooperation with most of the relevant agencies and sources of data. Fund at \$38,000.

Executive Director's Preliminary Recommendation Fund contingent on submittal of (a) a revised Detailed Project Description that more clearly articulates how the maps will benefit restoration and clarifies what type of digital information will be produced and (b) a budget not to exceed \$38,000 that reflects funding contributions from other sources. Consideration should be given to putting the digital information on a disk suitable for use by boat operators. This project, which will integrate and depict information generated through the EVOS damage assessment and restoration programs on a new series of seasonal maps identifying "environmentally sensitive areas" in Prince William Sound, will aid synthesis and application of this information for restoration and spill response purposes. In developing the maps, NOAA should work directly with the principal investigators of the three ecosystem projects (SEA/320, NVP/025, APEX/163) and should structure the review phase of the project to provide the maximum opportunity for agency review of the maps. Prince William Sound communities will also be invited to participate in the review phase of the project.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	Recom.	FY01 Recom.	Total FY99-02
99369	Maps Depicting Environmentally Sensitive Areas in Prince William Sound (Summary Seasonal and Detailed Maps)	J. Whitney/NOAA	NOAA	New 1st yr. 1 yr. proj	\$165.3 ect	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

A series of summary seasonal and detailed maps depicting environmentally sensitive areas in Prince William Sound will be produced in both hardcopy and digital formats. A previous summary series was produced in paper format only in 1988 and 1983, respectively. However, these maps need to be updated with new information on the distribution, abundance, life history, and sensitivity of the natural resources in Prince William Sound. This project will integrate and depict the most current information onto an updated series of maps, produced at a scale of 1:250,000 (previous maps were at 1:333,300) for the summary maps, and 1:63,360 (previous maps at this same scale) for the detailed maps. The summary maps will be produced as posters and folded maps. The 42 detailed maps will be bound in atlas format. Both will be rendered as a digital product. These two scales of maps will allow for a much broader range of use than just one scale alone, and preparing them together will be very cost effective.

Chief Scientist's Recommendation
While preparation of maps depicting
environmentally sensitive areas in Prince William
Sound is valuable (see recommendation for
Project 99368), I would not recommend going
forward with the additional expense of preparing
the detailed maps proposed in this project. Do
not fund.

Executive Director's Preliminary Recommendation
Do not fund. Although the FY 99 Invitation
requested proposals for environmentally sensitive
area maps, the summary seasonal maps proposed in
Project 99368 will more cost-effectively meet the
Trustee Council's need to synthesize and integrate
information generated through the EVOS damage
assessment and restoration programs.

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99382	Exxon Valdez Oil Spill Information-Transfer Workshop for Managers	D. Gibbons/USFS	USFS	New 1st yr. 2nd yr. p	\$35.3 project	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recomm	mendation		Executive Dir	rector's Pre	liminary Re	commend	latio <u>n</u>

Communicating the results of the restoration program has been an ongoing activity for the Restoration Office. Scientists conducting restoration projects are encouraged to publish and present their results in order to make information available to the scientific community. The Trustee Council also works to communicate information to the public. One audience that has not been the focus of these efforts is the mid-level managers who make daily decisions in the management of injured resources and services throughout the spill area. These individuals may be informed about restoration activities conducted by their own agencies, but unaware of information gathered by other agencies. This project will facilitate communication of the restoration program with managers through a two-to-three day workshop specifically designed for management purposes. An interagency group will direct the workshop presentations by developing questions to be addressed and facilitating an extended question and answer period.

Chief Scientist's Recommendation This proposal addresses an important issue that is very relevant to restoration objectives, but the technical approach could be strengthened to ensure success. A successful workshop requires more preparation and follow-up than indicated and more pre-workshop interactions between managers and scientists to ensure useful products. No examples of the kinds of issues or questions to be addressed are included in the proposal. Thirty percent of the principal investigators' time would be in the scheduled meetings, and the remaining 14 days spread over the rest of the year need to be supplemented in order to accomplish better planning for the workshop. I will look forward to working with the US Forest Service, the

Restoration Office, and other agencies to

proposed.

develop a revised proposal. Do not fund as

Executive Director's Preliminary Recommendation
Do not fund. The goal of this project, which is to
facilitate the transition of research findings into
management tools for Alaska resource agencies, is
an important one. However, there are questions
about whether the proposed workshop is the most
effective way to achieve this goal. A revised
proposal may be considered after the Restoration
Office has had the opportunity to discuss with all the
state and federal resource management agencies
other possible ways of approaching this issue.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99394	Development of Maps Depicting Environmentally Sensitive Areas in Prince William Sound	J. Michaelson, K. Boggs/UAA	ADFG	New 1st yr. 1 yr. proj	\$116.7 ect	\$0.0	\$0.0	\$0.0	\$0.0
	Project Abstract	Chief Scientist's Recommenda	ation		Executive Dir	ector's Pre	liminary Re	commend	lation

This project will develop a database that identifies areas environmentally sensitive to potential oil spills within Prince William Sound. It will provide a tool for use by oil response teams and planners who need detailed information in regard to species rarity and seasonal use of critical habitat areas. The spatial database will be constructed using Arc/Info software and contain approximately 66 data layers. Access to this information will be made available to a broad-based user audience through its distribution over the Internet on the EVOS home page. A series of four seasonal maps (winter, spring, summer, and fall) will be developed, each presenting a broad, regional overview of environmentally sensitive resources. These will be primarily for display purposes and oriented to the general user, similar to seasonal maps produced by the National Oceanic and Atmospheric Administration in 1988.

Chief Scientist's Recommendation
This proposal is responsive to the FY 99
Invitation, and would aid the synthesis and application of these data for restoration and response purposes. The proposers are experienced with building and maintaining computer databases, though they are not directly experienced with environmentally sensitive area maps and standards. This proposal is expensive relative to Project 99368, and it is not clear what the additional funds will produce. Do not fund,

Executive Director's Preliminary Recommendation
Do not fund based on technical review. Although the
FY 99 Invitation requested proposals for
environmentally sensitive area maps, Project 99368
more directly responds to the Trustee Council's need
to synthesize and integrate information generated
through the EVOS damage assessment and
restoration programs.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
99455	An Investigation of the Data System for the EVOS Long Term Monitoring Program	C. Falkenberg/ECOlogic Corp.	ADNR	New 1st yr. 1 yr. pro	\$49.9 ject	\$49.9	\$0.0	\$0.0	\$49.9
creation or long-term addition to be a critical long-term. Therefore, delivery is process. and provide systems the data is system is system is system is system.	Project Abstract ct will investigate the issues relating to the f the data delivery system needed by the monitoring and research program. In data collection, data delivery will prove to al component of the success of the monitoring and research program. as that program is planned the data sues need to be integrated into the This project will outline some of those issues de background research into existing hat deliver similar data. A specific design for system will not be proposed; rather, the data sues that need to be included in the process will be presented.	Chief Scientist's Recommendar This proposal represents an extra valuable initial step for planning a long-term research and monitorin project will also provide a cost-eff assessment of critical data system calling upon the principal investig experience with data systems op National Science Foundation, Na and Atmospheric Administration, Aeronautic and Space Administra others. The project report will nee technical jargon to be effective, a options to pursue and the consect these choices. The "contractual s budget need additional explanation"	aordinarily an effective ag program fective m design is eator's erated by tional Ocea National ation, and ed to be fre and must po quences of services" in	. The	Executive Direction Defer decision makes its deci (probably Fall clarification. The control data collected research and in number of use	on funding ision on the 1998). If fu his project through the monitoring	y until the T Restoration unded, bud is designed potential effort is use	rustee Co on Reserve get needs d to ensure EVOS long	uncil e e that g-term

pending Trustee Council decision on use of the

Restoration Reserve.

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Proj.No.	Project Title	Proposer	Lead Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
99456	Evaluating Scientific Sampling Conducted During the Oil Spill, Synthesizing Lessons Learned, and Incorporating Them into Natural Resource Injury Assessments	A. Crook/ADEC	ADEC	New 1st yr. 2 yr. proje	\$189.4 ct	\$0.0	\$0.0	\$0.0	\$0.0

Project Abstract

Since the oil spill, a tremendous amount of scientific research has been conducted on the impacts of the spill and recovery of injured resources and services in the spill impacted area. Despite this wealth of information, there has been no comprehensive evaluation and compilation to determine which sampling methods, studies, and restoration projects were effective and which were not. This project will review scientific research findings from agencies, and where appropriate, the University of Alaska, Exxon Corporation, and private contractors, and create a scientific sampling protocol that most efficiently documents environmental impacts and better prepares state and federal resource agencies to assess injuries in the event of another spill.

Chief Scientist's Recommendation

This proposal highlights the important issue of making sure that the experience gained from response and restoration after the oil spill is used to improve our ability to understand and mitigate the impacts of future spills. The technical approach in the proposal is vague and sections of the proposal are unfinished. A comprehensive review of the scientific methods and approaches requires involvement of very experienced ecologists, toxicologists, and statisticians. The proposal does not provide evidence of such expertise. A rigorous review of this issue could be an important contribution to the legacy from the restoration program, but I do not believe the proposal in its present form will succeed in that important task. Do not fund.

Executive Director's Preliminary Recommendation

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Project withdrawn by proposer.

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd		FY99 Recom.	FY00 Recom.	FY01 Recom.	Total FY99-02
Administrat	tion, Science Management, and Public Info.				\$2,998.5	\$2,991.8	\$0.0	\$0.0	\$2,991.8
99100	Administration, Science Management, and Public Information	All Trustee Council Agencies	ALL	Cont'd	\$2,500.0	\$2,493.3			\$2,493.3
managem of the res Office. It staff work the scient efforts ind Group (P. participati	Project Abstract ect provides overall support for science nent, public involvement, and administration storation program through the Restoration includes funding for the Trustee Council king at the direction of the Executive Director, tific peer review process, public involvement cluding the 17-member Public Advisory AG), and support for Trustee agency ion in the restoration program as part of the on Work Force.	Chief Scientist's Recommendation Proposal not reviewed.			Executive Director's Preliminary Recommendation Fund at FY 99 projected level of \$2,500,000 but continue budget review. This project provides overall support for administration and implementation of the restoration program. The FY 99 budget will be reduced from the FY 98 authorization of \$2,796,300. [NOTE: This project will be funded outside of the regular FY 99 work plan of research, monitoring, and general restoration projects.]				
space, as SeaLife O for fundin 99: 99190 Rockfish Research 99348/Riv Seal Meta	Alaska SeaLife Center Bench Fees Project Abstract ect will pay for the use of labs and office is well as other direct expenses, at the Alaska Center by the eight projects recommended in that plan to use the SeaLife Center in FY D/Pink Salmon Genome, 99252/Genetics of and Pollock, 99327/Pigeon Guillemot in, 99341/Harbor Seal Health and Diet, over Otter Response to Oil, 99371/Harbor abolism, 99432/Effects of Oil on the High	All Trustee Council Agencies <u>Chief Scientist's Recommend</u> This is an essential cost of doin Alaska SeaLife Center. Fund.		Cont'd	\$146.5 Executive D Fund conting calculation. when the ber this project w the individua The Alaska S use of its fac rate included negotiated by	Prior to publinch fees have will be dismar I research proseaLife Centrilities by EVC in this proje	er review of the cation of the been finantled and the ojects which er charges DS research is a special control of the control	f bench fee ne final wo ally determ ne fees add ch they su bench fee chers. The cial rate	erk plan, ined, ded to oport. s for bench

Cockscomb, and 99441/Harbor Seal Diet. The cost is

calculated on a negotiated per-square-foot basis, and

is not reflected in the individual project budgets.

Center, in consideration of the Trustee Council's \$26

million contribution to the Center's construction.

		_	Lead Agency	New or Cont'd	FY99 Request	FY99 Recom.	FY00 Recom.	FY01	Total FY99-02
Proj.No.	Project Title	Proposer	- Agency	Conta		TCCOIII.	rtecom.	TRECOITI.	1 199-02
99470	Symposium on the 10th Anniversary of the <i>Exxon Valdez</i> Oil Spill	Restoration Office		New 1st yr. 1 yr. proj	\$152.0 ect	\$152.0	\$0.0	\$0.0	\$152.0
the Trustee in Anchorag the Prince V Council will I open with ar restoration p sessions. T several anni traveling extending ex	Project Abstract 99, the 10th anniversary of the oil spill, Council will sponsor a five-day symposium e. The Alaska Sea Grant Program and Villiam Sound Regional Citizens' Advisory be cosponsors. This public symposium will n overview session on the oil spill and the program, followed by more technical the symposium will be the centerpiece of versary-related efforts, including a hibit in spill-region communities and a versary edition of the annual status	Chief Scientist's Recommendat Proposal not reviewed.	<u>ion</u>	F F tl	Executive Dir Fund continge Project Descri he 10th Anniv March 1999.	nt on addition	onal review udget. This	of Details project w	ed /ill fund
99471	Updating the Status of Services Reduced or Lost Due to the Oil Spill	Restoration Office		New 1st yr. 1 yr. proj	\$200.0 ect	\$200.0	\$0.0	\$0.0	\$200.0
Project Abstract The Restoration Plan (1994) identifies four services as lost or reduced by the oil spill subsistence, commercial fishing, recreation/tourism, and passive use and a recovery objective for each. Although the status of these services was discussed briefly in the Update on Injured Resources and Services (1996), no formal studies have been sponsored by the Trustee Council to measure their recovery. With an eye to the 10th anniversary of the spill, this project will evaluate the status of each service. Methods will likely include reviewing existing information provided through ongoing EVOS research as well as commissioning agency personnel or outside experts to review or gather additional information.		Chief Scientist's Recommendat Proposal not reviewed.	<u>ion</u>	Executive Director's Preliminary Recomm Fund contingent on review and further con of Detailed Project Description and detailed The Trustee Council, at its June 8, 1998 m indicated an interest in updating the reduce services prior to the 10th anniversary of the directed the Restoration Office staff to develope proposal for Council consideration.			er consider etailed bu 998 meeti reduced/lo of the sp	eration idget. ng, ost ill, and	

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Recom.	Recom.	FY99-02
Research F	Facilities		7.7		\$2,256.5	\$0.0	\$0.0	\$0.0	\$0.0
99474	Endowment of the Environmental Restoration Center at the University of Alaska Anchorage	G. Baker, H. Schroeder/UAA	ADFG	New 1st yr. 1 yr. proj	\$2,256.5 ject	\$0.0	\$0.0	\$0.0	\$0.0
	5	01:10:4:4			- "		–		

Project Abstract

This project will establish an endowed environmental restoration center for research and community education at the University of Alaska Anchorage, within the School of Engineering. Establishing the center will achieve two goals. First, it will provide a mechanism for funding continuing recovery work and community education long after 2002 when funds are no longer received from Exxon Corporation. Such activities will help Alaska develop local expertise and permanent solutions for the protection and restoration of areas affected by the oil spill. Establishment of the center will also serve as a test program that will allow the Trustee Council to resolve existing questions for endowment of research centers and chairs.

Chief Scientist's Recommendation This project would establish an endowed environmental research center within the University of Alaska Anchorage School of Engineering. The legal and policy issues related to endowments are ones for the Trustee Council to address. However, the substantive content of the proposed research center is oriented toward oil-spill response technologies. This proposal is not closely linked to EVOS recovery objectives. Do not fund

Executive Director's Preliminary Recommendation Do not fund. The Trustee Council anticipates making a decision on the use of the Restoration Reserve. and hence the future of the restoration program, in Fall 1998. The results of an extensive public process undertaken by the Restoration Office in March/April 1998 are currently under consideration by the Council. An endowment for the University of Alaska is among the suggestions received for use of the Reserve. Questions about the legal permissibility of an endowment under the current settlement agreement have been raised.

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Project Management	\$480.0	\$480.0

ALL.

Cont'd

99250

Project Management

Project Abstract

Project management represents those costs incurred by the state and federal Trustee agencies in fulfilling their responsibility to ensure that individual projects are managed consistent with the Memorandum of Agreement and Consent Decree, the Restoration Plan, and Trustee Council authorization.

All Trustee Council Agencies

Chief Scientist's Recommendation

Proposal not reviewed.

FVQQ

Nowor

FYQQ

FYOO

EV01

Total

\$480.0

\$480.0

Executive Director's Preliminary Recommendation Fund at level of \$400,000 to \$480,000 contingent on submittal and review of individual agency project management budgets. The level of project management funding will depend on the level of overall work plan funding for FY 99; the work plan target for FY 99 is \$10-12 million. The FY 99 funding level will be a reduction from the amount approved for FY 98 (\$560,100). Future years' funding is expected to decline further, consistent with the decline in the annual funding targets for the overall work plan. Project management provides essential accountability for the work plan process.

Lead

New or

FY99

FY00

FY01

Total

FY99

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom	. Recom.	Recom.	FY99-02
Restoration F	Reserve				\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$48,000.0
the oil spill r Council esta funds to be payment is September deposit in F reserve acc to \$72 millio of the next t million plus restoration a	Restoration Reserve Project Abstract on of the fact that complete recovery from may not occur for decades, the Trustee ablished the Restoration Reserve to hold used for restoration after the last received from Exxon Corporation in 2001. The \$12 million recommended for Y 99 will be the sixth deposit into the count and will bring the total in the account on. Annual deposits of \$12 million in each three years will provide a reserve of \$108 interest. These funds will be used for activities. A decision by the Trustee allocation of the funds to specific activities to be made in Fall 1998.	All Trustee Council Agencies <u>Chief Scientist's Recommendati</u> Proposal not reviewed.	ALL on	Cont'd	41	Director's Pritional \$12 Reserve. Ton can cont from Exxoner funded our research, r	the Reserve tinue beyon on Corporati utside of the	ecommend sit into the will help e d the time on. [NOTI regular F)	nsure of the E: This

Exxon Valdez Oil Spill Trustee Council 645 G Street, Suite 401 Anchorage, AK 99501-3451

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