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Exxon Valdez Oil Spill Trustee Council
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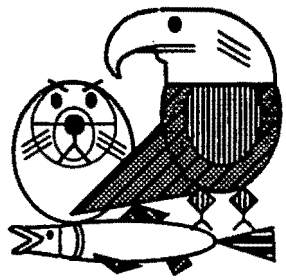

MEMORANDUM

To: **Restoration Work Force**
Agency Liaisons
Legal Counsel

From: **Molly McCammon**
Executive Director

Re: **Preliminary Revised Draft of Chapter 5 (Recovery Objectives)**

Date: **December 29, 1995**

Pages 5 and 32 of the Restoration Plan note that the plan is a dynamic document, subject to updating based on new information. On that basis, I have attached for your review a preliminary revised draft of Chapter 5 of the Restoration Plan. The next step in this process is for agency staff to review this at a macro level in order to identify areas where you believe there may be significant errors in fact or concept. It would be helpful if you could return your comments to Stan Senner by January 9, the date of the next meeting of the Restoration Work Force.

Based on your comments and concerns, we will produce another, revised draft, which will be distributed to participants in the 1996 Restoration Workshop. This draft will be among the materials handed out at the workshop registration table on January 16th.

These revised recovery objectives will be discussed at the workshop in breakout sessions on Thursday, January 18th, and with the core peer reviewers before they leave Anchorage. Based on this feedback, the Restoration Office staff will then make additional revisions and copies will be circulated to you and the Trustees. I will looking for the Trustees' "informed consent" so that this can be sent out for public comment in February, along with the FY 1997 Invitation. Following public comment, a final version will be prepared for Trustee Council action, probably at the same time as they consider the FY 1997 Work Plan.

The primary focus of this revised Chapter 5 is on Injury Status and Recovery Objectives. We propose to delete the generic discussion of strategies, which is badly out of date, as well as the resource-specific strategies, which are better covered (and updated) through the annual Invitations. We propose to retain the strategies for the

services, although they may still need to be revised. With respect to the status of Injury and Recovery, the discussion for each resource is opened with a statement or two of context and a description of why the resource or service originally was considered to be injured. Each discussion is closed with a few sentences regarding current status. In regard to the Recovery Objectives, the goal was to identify a goal that is realistic and measurable, given what we know about a resource or service's current status.

An earlier draft of this document was reviewed by Dr. Spies and the core peer reviewers, but please identify where more work may be needed. Do not worry now about editorial details, although such comments are always welcome. Thank you for your help with this. Give Stan or me a call if you have any questions.

enclosure (1)

cc: Robert Spies
Core peer reviewers

29 Dec 95
DRAFT

Table 1. Resources and Services Injured by the Spill

INJURED RESOURCES

Recovered

Bald eagle

Recovering

~~Bald eagle~~
~~Black oystercatcher~~
Common murre
Intertidal organisms
~~(some)~~ (everything)
~~Killer whale~~
Mussels
~~Pink salmon~~
Sockeye salmon
~~(Red Lake)~~ (all systems)
Subtidal organisms
~~(some)~~ (everything)

Not Recovering

~~Common murre~~
Harbor seal
Harlequin duck
~~Intertidal organisms~~
~~(some)~~
Killer whale
(AB pod)
Marbled murrelet
Pacific herring
Pigeon guillemot
~~Pink salmon~~
Sea otter
~~Sockeye salmon~~
~~(Kenai & Akalura systems)~~
~~Subtidal organisms~~
~~(some)~~
~~Archaeological resources~~
~~Sediment~~

Recovery Unknown

Clams - ?
Common loon
Cutthroat trout
Black oystercatcher
Dolly Varden
Kittlitz's murrelet
River otter
Rockfish

Other

Archaeological resources
Designated wilderness areas
Sediments

Services

Commercial fishing
Passive uses
Recreation and Tourism
Subsistence

29 Dec 1995
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Chapter 5
~~Goals, Objectives, and Strategies~~
Injury Status and Recovery Objectives

~~This chapter presents goals, objectives, and strategies for restoration.~~ The first part of this chapter discusses ~~goals,~~ recovery objectives~~, and strategies~~ in general. The second part describes the nature and extent of injury and recovery and ~~the~~ recovery objective~~, and the restoration strategy~~ for each injured resource and service discussed in Table 2 in Chapter 4. Detailed information on injury and recovery objectives~~, and strategies~~ can be found on the following pages:

Overview

The first part of this chapter discusses goals, objectives, and strategies in general. A goal is the end toward which an endeavor is directed; objectives are descriptions of measurable outcomes; and strategies are plans of action. Taken together, goals, objectives, and strategies produce a blueprint for restoring the spill area. To be funded, a project must be consistent with the goals and policies of the Restoration Plan and with restoration objectives and strategies as they change over time.

GOAL: *The end toward which restoration is directed*

The goal of restoration is recovery of all injured resources and services. Recovery is to be sustained by healthy, productive ecosystems that maintain naturally occurring biodiversity. All restoration actions must be directed toward this goal.

OBJECTIVES: *Measurable outcomes of restoration*

Objectives

The recovery objectives described in the following section of the restoration program are the measurable conditions that signal the recovery of individual resources or services. They are the yardsticks against which the success of the program is measured. In general, resources and services will have recovered when they return to conditions that would have existed had the spill not occurred. In nature, however, populations often undergo large natural changes, and Because it is difficult to predict conditions that would have existed in the absence of the spill. recovery is often Recovery, therefore, is most realistically defined as a return to prespill conditions or to levels that fall within the bounds of natural variation. For resources that were in decline before the spill, like harbor seals marbled murrelets, recovery may be achieved consist of stabilizing the when a population is stabilized, even if at a lower level than before the spill. For some resources, little is known about their injury and recovery status, so it is difficult to define recovery.

Where few little prespill data exist, injury is inferred from comparisons of oiled and unoiled areas, and recovery is usually defined as a return to conditions comparable to those of unoiled areas. Because the differences between oiled and unoiled areas may have existed before the spill, statements of injury and objectives based on these differences are often less certain than in those cases where prespill data exist. Alternatively, injury may be evaluated based on the number of oiled carcasses picked up following the spill relative to the estimated size of the spill-area population. Even in cases where some prespill data are available, However, there also is can be some uncertainty associated with interpreting the significance of prespill population data since populations undergo natural fluctuations. In all cases, indicators of recovery can include increased numbers of individuals, reproductive success, improved growth and survival rates, and normal age and sex composition of the injured population.

Full ecological recovery will have been achieved when the population of flora and fauna are

again present at former or prespill abundances, are healthy and productive, and there is a full complement of age classes at the level that would have been present had the spill not occurred. A recovered ecosystem provides the same functions and services as would have been provided had the spill not occurred.

[NOTE: WE PROPOSE TO ELIMINATE THE FOLLOWING GENERIC DISCUSSION OF STRATEGIES, AS WELL THE DISCUSSION OF SPECIFIC STRATEGIES FOR EACH INJURED RESOURCE (BUT NOT FOR SERVICES). THIS STUFF IS PROBABLY BEST COVERED THROUGH THE INVITATIONS, WHERE IT IS UPDATED ANNUALLY. IN ADDITION, SOME OF THE MORE GENERIC DISCUSSION IS ALREADY COVERED IN CHAPTER 3 OF THE RESTORATION PLAN. IF WE WERE TO RETAIN THIS MATERIAL, IT WOULD REQUIRE SUBSTANTIAL REVISION.]]

~~STRATEGIES: *Plans of action*~~

~~A restoration strategy is a plan of action for achieving objectives. Each year, through its annual or multiyear work plan, the Trustee Council decides which strategies to implement. Restoration strategies reflect consideration of ecosystem relationships. For example, the strategy for some injured resources includes research into why they are not recovering, such as declining or contaminated food sources or disruption of ecosystem relationships.~~

~~In this section, restoration strategies are presented under three headings: Biological Resources, Other Resources, and Services.~~

~~**Biological Resources**~~

~~Because restoration strategies for biological resources depend on whether the resource is recovering, strategies are subdivided into those for recovering resources, resources that are not recovering, and resources whose recovery is unknown.~~

~~***Recovering Resources.*** The fact that a resource is recovering suggests that nature will restore it without intervention. Consequently, restoration of recovering resources will rely primarily on natural recovery.~~

~~Because these resources are recovering, research into factors limiting recovery and general restoration projects to accelerate recovery may not be warranted. However, if a resource is not expected to recover fully on its own or if waiting for natural recovery will cause long-term harm to a community or service, appropriate alternative means of restoration would be undertaken. Habitat protection and monitoring are encouraged, as are general restoration projects that protect the resource from other sources of potential injury. (Restoration strategies under "Services" also apply to these resources.)~~

~~The restoration strategy for recovering resources has three parts:~~

- ~~Rely on natural recovery~~
- ~~Monitor recovery~~

- Protect injured resources and their habitats

Resources Not Recovering. Except for certain protective measures, attempts to restore these resources without knowing why they are not recovering may be ineffectual or even detrimental. For this reason, the restoration strategy for these resources emphasizes determining why they are not recovering, and eliminating threats to the remaining populations.

Where sufficient knowledge about the nature of injury exists, the restoration strategy also encourages actions to promote recovery. The populations of some of these resources are in a steep decline and may not recover without help. Furthermore, some of these resources have subsistence or economic importance and their recovery is linked to the recovery of these services. (Restoration strategies under "Services" also apply to these resources.)

Research is encouraged, provided it helps explain why a resource is not recovering. Habitat protection and monitoring are also encouraged. General restoration projects are allowed if they address factors limiting recovery or if they protect the resource from other sources of potential injury.

The restoration strategy for resources that are not recovering has four parts:

- Conduct research to find out why these resources are not recovering
- Initiate, sustain, or accelerate recovery
- Monitor recovery
- Protect injured resources and their habitats

Recovery Unknown. If specialists do not know whether a resource is recovering, it will be treated in much the same way as a recovering resource. Until more is known about the nature and extent of injuries and the degree of recovery of these resources, restoration will rely primarily on natural recovery, aided by monitoring and protective measures.

Because the recovery of these resources is unknown, and, in some cases, the injury poorly understood, research into factors limiting recovery and general restoration projects to accelerate recovery may not be warranted. Habitat protection and monitoring are encouraged, as are general restoration projects that protect these resources from other sources of potential injury.

The restoration strategy for resources whose recovery is unknown has three parts:

- Rely on natural recovery
- Monitor recovery
- Protect injured resources and their habitats

Other Resources

Other injured resources include archaeological resources, designated wilderness areas and oiled sediment. The strategy for restoring archaeological resources seeks to repair and protect injured

~~sites and artifacts. The strategy for sediment includes removal or reduction of residual oil and monitoring. Any restoration strategy that aids recovery of injured resources, or prevents further injuries, will assist recovery of designated wilderness areas or wilderness study areas.~~

~~**Services**~~

~~Commercial fishing, passive use, recreation (including sport fishing) and tourism and subsistence are services that were reduced or lost because of the spill. Injured resources that support these services include clams, harbor seals, Pacific herring, pink salmon, sea otters, and sockeye salmon. The primary way to restore services is to restore the resources on which they depend.~~

~~Additional restoration strategies for commercial fishing, recreation and tourism, and subsistence include promoting recovery of the service as soon as possible through such means as increasing the availability, reliability, or quality of the resource on which the service depends. For some resources, this may take the form of increasing availability in the long run through improved resource management or providing replacement resources. Strategies for recreation and tourism and subsistence also include removing or reducing residual oil if treatment is cost effective and less harmful than leaving the oil in place.~~

~~Objectives and Strategies by Resource and Service~~
Injury Status and Recovery Objective

This section describes the nature and extent of injury and recovery and the recovery objective~~, and the restoration strategy~~ for each injured resource and service. Specific strategies to achieve recovery objectives are described in annual work plans and restoration project invitations (e.g., *Invitation to Submit Restoration Projects for Federal Fiscal 1997 and Draft Restoration Program: FY 97 and Beyond).* The information in this section is expected to change ~~over time~~ as the restoration program adapts to new information. For example, population declines or sublethal effects may be documented for new resources, some resources may begin to recover or never recover, and recovery objectives ~~and strategies may~~ will change in response to new information and conditions. Hypotheses for why resources are not recovering are particularly susceptible to change as prevailing hypotheses are tested and new ones are formed.

New scientific data will be incorporated into restoration decisions without the need to change the plan. However, changes will be reported in the Trustee Council's annual status report.

Resources

ARCHAEOLOGICAL RESOURCES

Injury and Recovery

Twenty-four archaeological sites on public lands are known to have been adversely affected by cleanup activities, or looting and vandalism linked to the oil spill. Additional sites on private land

may have been injured, but damage assessment studies were limited to public land.

Documented injuries include theft of surface artifacts, masking of subtle clues used to identify and classify sites, violation of ancient burial sites, and destruction of evidence in layered sediments. In addition, vegetation has been disturbed, which has exposed sites to accelerated erosion. The effect of oil on soil chemistry and organic remains may reduce or eliminate the utility of radiocarbon dating in some sites.

Assessments of 14 sites in 1993 suggest that most of the archaeological vandalism that can be linked to the ~~*Exxon Valdez* oil~~ spill occurred in 1989 before adequate constraints were put into place over the activities of oil spill clean-up personnel. Most vandalism took the form of "prospecting" for high yield sites. In 1993, only two of the 14 sites visited showed signs of continued vandalism, ~~and the link between~~ but it is difficult to prove that this recent vandalism was related to the spill. ~~and the *Exxon Valdez* oil spill remains highly problematical~~. Oil ~~samples have not yet been analyzed, but oil~~ was visible in the intertidal zones of two of the 14 sites monitored in 1993, but because oil samples have not yet been analyzed, the *Exxon Valdez* oil spill cannot be confirmed as the source of the oil in these sites.

Monitoring of archaeological sites in 1994 and 1995 found no evidence of new damage from vandalism. The presence of oil is being determined in sediment samples taken from four sites in 1995.

None of the archaeological artifacts collected during the spill response, damage assessment, or restoration programs is stored within the spill area. These artifacts are stored in the University of Alaska Museum in Fairbanks and in the Federal Building in Juneau. Native communities in the spill area have expressed a strong interest in having them returned to the spill area for storage and display.

The Alutiiq Archaeological Repository in Kodiak, whose construction costs were partly funded by the Trustee Council, is the only physically appropriate artifact storage facility in the spill area. In 1995 the Trustee Council approved funds for development of a comprehensive community plan for restoring archaeological resources in Prince William Sound and lower Cook Inlet, including strategies for storing and displaying artifacts at appropriate facilities within the spill area.

Recovery Objective

Archaeological resources are nonrenewable: they cannot recover in the same sense as biological resources. Archaeological resources will be considered to have recovered when spill-related injury ends, looting and vandalism are at or below prespill levels, and the artifacts and scientific data which remain in vandalized sites are preserved (e.g., through excavation, site stabilization, or other forms of documentation). ~~Artifacts and data are typically preserved through excavation or other forms of documentation, or through site stabilization, depending on the nature of the injury and the characteristics of the site.~~

Bald Eagles

Injury and Recovery

Prince William Sound provided year-round and seasonal habitat for about 5,000 bald eagles. ~~Two hundred to 300~~ About 250 bald eagles are estimated to have died as a result of ~~may have been killed in~~ the spill, and productivity was reduced in oiled areas of Prince William Sound in 1989. Productivity was back to normal in 1990 and 1991, and an aerial survey of adults in 1995 indicated that the population has returned to or exceeded its prespill level in Prince William Sound. ~~However, population estimates made in 1989, 1990, and 1991 indicate that there may have been an increase in the Prince William Sound bald eagle population since the previous survey conducted in 1984. Productivity decreased in 1989, but appeared to have recovered by 1990. Because population and productivity appear to have returned to prespill levels, bald eagles may have already recovered from the effects of the spill.~~

Recovery Objective

Because the Prince William Sound population and productivity are at or above prespill levels, the bald eagle has recovered from the effects of the Exxon Valdez oil spill. ~~Bald eagles will have recovered when their population and productivity return to prespill levels.~~

Black Oystercatchers

Injury and Recovery

Black oystercatchers spend their entire lives in or near intertidal habitats and are highly vulnerable to oil pollution. An estimated 1,500-2,000 oystercatchers live in south-central Alaska. Only nine carcasses of adult oystercatchers were recovered following the spill, but estimated mortality may have been as high as, but probably did not exceed, 20 percent in the spill area. In addition, breeding activities were disrupted by the oil and clean-up activities. In comparison with oystercatchers on the largely unoiled Montague Island, oystercatchers at heavily oiled Green Island had reduced hatching success in 1989 and their chicks gained weight more slowly during 1991-93. Interpretation of these data on reproductive performance, however, are confounded by lack of pre-spill data. Productivity and survival of black oystercatchers in Prince William Sound have not been monitored since 1993, and the recovery status of this species is not currently known. ~~Within Prince William Sound, an estimated 120 to 150 black oystercatchers, representing 12-15 percent of the total estimated population, died as a result of the spill. Mortality outside of Prince William Sound is unknown. Black oystercatchers are recovering, although they may still be exposed to hydrocarbons when feeding in intertidal areas.~~

Recovery Objective

Black oystercatchers will have recovered when the Prince William Sound population returns to ~~attain~~ prespill levels and reproduction is normal. An increasing population trend and comparable

hatching success and growth rates of chicks in oiled and unoiled areas will indicate that recovery is underway. ~~reproductive success of nests and growth rates of chicks raised in oiled areas are comparable to those in unoiled areas.~~

CLAMS

Injury and Recovery

The magnitude of impacts on clam populations varies with the species of clam, degree of oiling, and location. However, data from the lower intertidal zone on sheltered beaches suggest that little-neck clams and, to a lesser extent, butter clams ~~on sheltered beaches~~ were killed or suffered slower growth rates as a result of the oil spill ~~by oiling~~ and clean-up activities. ~~In addition, growth appeared to be reduced by oil, but determination of sublethal or chronic effects is awaiting final analyses.~~ In communities on the Kenai Peninsula, Kodiak, and Alaska Peninsula, concern about the effects of the oil spill on clams and subsistence uses of clams remains high.

Recovery Objective

Based on prespill data or comparisons of oiled and unoiled sites, clams will have recovered when populations and productivity have returned to levels that would have prevailed in the absence of the oil spill ~~(prespill data or unoiled control sites)~~.

COMMON LOONS

Injury and Recovery

Carcasses of 395 loons of four species were recovered following the spill, including at least 216 common loons. The population sizes are not known for any of these species, but, in general, loons are long-lived, slow-reproducing, and have small populations. Common loons in the oil-spill area may number only a few thousand, including only hundreds in Prince William Sound. Common loons injured by the spill probably included a mixture of resident and migrant birds, and their recovery status is not known.

Recovery Objective

Without more information on injury to common loons and their recovery status, no recovery objective can be identified.

COMMON MURRES

Injury and Recovery

About 30,000 carcasses of oiled birds were picked up following the oil spill, and 74 percent of them were common and thick-billed murres (mostly common murres). Many more murres died than were actually recovered, and it is estimated that the spill-area population declined by about 40 percent, including at colonies at Resurrection Bay, the Chiswell, Barren, and Triplet islands,

and Puale Bay. In addition to direct losses of murres, there was evidence that the timing of reproduction was disrupted and productivity reduced. Interpretation of the effects of the spill, however, is complicated by incomplete prespill data and by indications that populations at some colonies were in decline before the oil spill.

Postspill monitoring of productivity at index colonies indicates that reproductive timing and success were again within normal bounds by 1993. Numbers of adult murres were last surveyed in 1994 [check] and, at that time, had not returned to prespill levels.

~~Productivity of common murres shows signs of recovery at some injured colonies (Barren Islands, Puale Bay) but postspill population counts are still lower than prespill estimates and show no sign of recovery.~~

Recovery Objective

Common murres will have recovered when populations ~~trends are increasing significantly~~ at index colonies have returned to prespill levels and when productivity is sustained within normal bounds. ~~in the spill area and when reproductive timing and success are (Normal bounds will be determined by comparing productivity data with information from other murre colonies in the Gulf of Alaska and elsewhere.)~~

Cutthroat Trout

Injury and Recovery

Prince William Sound is at the northwestern limit of the range of cutthroat trout, and few stocks are known to exist within the sound. Local cutthroat populations rarely number more than 1,000 each, and the fish have small home ranges and are geographically isolated. Cutthroat trout, therefore, are highly vulnerable to exploitation, habitat alteration, or pollution. Following the oil spill, cutthroat trout in a small number of oiled index streams grew more slowly than in unoiled streams, possibly as a result of reduced food supplies or exposure to oil, and there is concern that reduced growth rates may reflect reduced survival. The difference in growth rates persisted through 1991. No studies have been conducted since then, and the recovery status of this species is not known. ~~Cutthroat trout have grown more slowly in oiled areas than in unoiled areas. Insufficient data are available to determine whether they are recovering.~~

Recovery Objective

Cutthroat trout will have recovered when growth rates within oiled areas are comparable to those for unoiled areas, after taking into account geographic effects.

Designated Wilderness Areas

Injury and Recovery

The oil spill delivered oil in varying quantities to the waters adjoining the seven areas within the spill area designated by Congress as wilderness areas and wilderness study areas. Oil also was deposited above the mean high-tide line in these areas. During the intense clean-up seasons of 1989 and 1990, thousands of workers and hundreds of pieces of equipment were at work in the spill area. This activity was an unprecedented imposition of people, noise, and activity on the area's undeveloped and normally sparsely occupied landscape. Although activity levels on these wilderness shores have probably returned to normal, but at some locations there is still residual oil.

Recovery Objective

Designated wilderness areas will have recovered when oil is no longer encountered in these areas and the public perceives them to be recovered from the spill.

DOLLY VARDEN

Injury and Recovery

Like the cutthroat trout, there was evidence that Dolly Varden ~~have grown~~ grew more slowly in oiled streams ~~areas~~ than in unoiled streams ~~areas~~, and there is concern that reduced growth rates reflect reduced survival. However, no data have been gathered since 1991, and the recovery status of this species is not known. ~~Insufficient data are available to determine whether they are recovering.~~

Recovery Objective

Dolly Varden will have recovered when growth rates within oiled streams ~~areas~~ are comparable to those ~~for~~ in unoiled streams ~~areas~~, after taking into account geographic effects.

Harbor Seals

Injury and Recovery

Harbor seal numbers were declining in the Gulf of Alaska, including in Prince William Sound, before the spill. An estimated 300 seals died in the sound as a direct result of the spill, and this was 6-15 percent of the prespill population. Postspill surveys in 19__ showed that seals in ~~the~~ oiled areas had declined by 43 percent, compared to 11 percent in ~~the~~ unoiled areas. Unfortunately, seals in both oiled and unoiled parts of Prince William Sound have continued to decline since the spill at an annual rate of about 6 percent. Possible factors for this long-term decline include disease and the amount or quality of food. ~~Counts made during the molt at trend count sites in Prince William Sound from 1990 to 1993 indicate that numbers may have stabilized. However, counts during pupping have continued to decline. It is not known which counts are the best indicator of population status. If the conditions that were causing the population to decline before the spill have improved, normal growth may replace the animals that were lost. However, if conditions continue to be unfavorable, the affected population may~~

~~continue to decline.~~ Harbor seals are a key subsistence resource in the oil-spill area ~~Prince William Sound~~. Subsistence hunting is ~~both~~ affected by the declining seal population and, in turn, may be affecting the recovery of harbor seals ~~status~~.

Recovery Objective

Recovery will have occurred when harbor seal population trends are stable or increasing.

HARLEQUIN DUCKS

Injury and Recovery

Harlequin ducks feed in intertidal and shallow subtidal habitats where most of the spilled oil was initially stranded. More than 200 harlequin ducks were found dead in 1989, mostly in Prince William Sound, and many more than that actually died throughout the spill area. Bile samples from harlequin ducks collected in eastern and western Prince William Sound in 1989-90 had higher concentrations of hydrocarbon metabolites than samples from harlequins collected at Juneau. Prespill data on harlequin populations and productivity are poor and complicated by possible geographic differences in habitat quality. However, the summer population in Prince William Sound is small, only a few thousand birds, and there continues to be concern about poor reproduction and a possible decline in numbers of molting birds in western versus eastern parts of the Sound. ~~There are indications of reduced densities of harlequin ducks in the breeding season; a declining trend in the summer, postbreeding population; and very poor production of young in western Prince William Sound.~~

Recovery Objective

Harlequin ducks will have recovered when breeding and postbreeding season densities and production of young return to ~~estimated~~ prespill levels. ~~or when there are no differences in these parameters between oiled and unoiled areas.~~ A normal population age- and sex-structure and reproductive success appropriate to the habitat in western Prince William Sound will indicate that recovery is underway.

Intertidal Organisms

Injury and Recovery

Portions of 1,500 miles of coastline were oiled by the spill, and both the oil and intensive clean-up activities had significant impacts on the flora and fauna of the intertidal zone, the area of beach between low and high tides. With tidal action, oil penetrated deeply into cobble and boulder beaches, and, even with intensive clean up activities, persists in some beaches today. The most significant impacts occurred in middle and upper intertidal zones on sheltered rocky shores, which is where the greatest amounts of oil were stranded.

Small invertebrates like limpets, barnacles, and marine worms were less abundant at oiled versus unoiled index sites in Prince William Sound, Kodiak Island, and on the Kenai and Alaska peninsula coasts. The size, coverage, and reproductive potential of seaweed *Fucus gardneri* (known as rockweed or popweed) also was reduced following the spill. Although numbers of many species of invertebrate fauna have increased following the spill, recovery of *Fucus* in the upper intertidal zone is lagging. Full recovery of *Fucus* is crucial for recovery of the intertidal ecosystem, since many invertebrates depend on the cover provided by this seaweed. Many intertidal resources are important to subsistence users, as well as to sea and river otters, black oystercatchers, harlequin ducks, and pigeon guillemots.

~~The lower intertidal zone and, to some extent, the middle intertidal zone are recovering. However, injuries persist in the upper intertidal zone, especially on rocky sheltered shores. Recovery of this zone appears to depend, in part, on the return of adult *Fucus* in large numbers.~~

Recovery Objective

~~Each intertidal elevation (lower, middle, or upper) will have recovered when community composition, population abundance of component species, age class distribution, and ecosystem functions and services in each injured intertidal habitat have returned to levels that would have prevailed in the absence of the oil spill.~~ Intertidal communities will have recovered when community composition on oiled shorelines is similar to that which would have prevailed in the absence of the spill. Indications of recovery are the return of keystone species, such as *Fucus*, and provision of adequate, uncontaminated food supplies for top predators in intertidal and nearshore habitats.

Killer Whales

Injury and Recovery

About ___ killer whales in _ "resident" pods regularly use Prince William Sound within their ranges. Other whales in "transient" pods enter the Sound less frequently. There has been particular concern in Prince William Sound about the resident AB pod, which numbered 36 animals prior to the spill. Fourteen whales disappeared from this pod in 1989 and 1990, during which time no young were recruited into the population. Although four calves were added to the AB pod during 1992-94, surveys in 1994 and 1995 indicate the loss of five more whales.

The link between these losses and the oil spill is only circumstantial, but the apparent mortality of killer whales in Prince William Sound following the spill far exceeds rates documented for pods in British Columbia and Puget Sound over the last 20 years. The AB pod may never regain its former size, but overall numbers of resident killer whales in Prince William Sound are at or exceed prespill levels. ~~Thirteen whales disappeared from one killer whale pod in Prince William Sound between 1988 and 1990. The injured pod is growing again.~~

Recovery Objective

Pending further evaluation of the status of the AB pod, no realistic recovery objective can be identified at this time. ~~Killer whales will have recovered when the injured pod grows to at least 36 individuals (1988 level).~~

~~Marbled~~ Murrelets, Marbled and Kittlitz's

Injury and Recovery

Prince William Sound and the northern Gulf of Alaska are key areas in the distributions of two poorly studied species of seabirds, marbled and Kittlitz's murrelets. The world population of Kittlitz's murrelet is believed to number only a few tens of thousands of birds, many of which are in the oil-spill area. The marbled murrelet is federally listed as a Threatened species in Washington, Oregon, and California; it is also listed as Threatened in British Columbia.

The marbled murrelet population~~s~~ in Prince William Sound was ~~were~~ in decline before the spill. The causes of the prespill decline are unknown, but may be related to changing food supplies. The oil spill probably increased the prespill rate of decline for this species in the spill area, although the incremental injury is difficult to estimate. ~~The population of marbled murrelets may be stabilizing or even increasing since the spill.~~ Carcasses of nearly 1,100 murrelets were found after the spill, and it is estimated that as much as __ percent of the Prince William Sound marbled murrelet population was killed by the spill. Population estimates for murrelets are highly variable, and postspill boat surveys do not yet indicate any statistically significant increase in numbers of marbled murrelets in Prince William Sound. The recovery status of Kittlitz's murrelet is not known.

Recovery Objective

Marbled murrelets will have recovered when population trends are stable or increasing. No recovery objective can be identified for Kittlitz's murrelet at this time.

Mussels

Injury and Recovery

Mussels are an important prey species in the nearshore ecosystem throughout the oil-spill area, and beds of mussels provide physical stability in the intertidal zone. For these reasons, mussel beds were purposely left alone during *Exxon Valdez* clean-up operations. In 1991, high concentrations of relatively unweathered oil were found in the mussels and underlying byssal mats in certain dense mussel beds. ~~In 1991, relatively high concentrations of oil were found in mussels and in the dense underlying mat (byssal substrate) of certain oiled mussel beds. The beds were not cleaned nor was oil removed after the spill. The~~ The biological significance of oiled mussel beds is not known, but they ~~Oiled mussel beds~~ are potential pathways of ~~sources of fresh (unweathered)~~ oil contamination for local populations of harlequin ducks, black oystercatchers, river otters, and juvenile sea otters, all of which feed to some extent on mussels and show some signs of continuing injury. ~~The extent and magnitude of oiled mussel beds are unknown.~~ At least __ [70-?] mussel beds in Prince William Sound are known to still have oil residue; 12 beds were cleaned on an experimental basis in 1994. Subsistence users also continue to be concerned about contamination from oil mussel beds.

Recovery Objective

Mussels will have recovered when they do not contaminate their predators. ~~their populations and productivity are at prespill levels and they do not contain oil that contaminates higher trophic levels.~~

PACIFIC HERRING

Injury and Recovery

Pacific herring spawned in intertidal and subtidal habitats in Prince William Sound shortly after the oil spill. As much as 10 percent of the intertidal spawning habitat and 40 percent of the herring staging areas in the sound may have been contaminated by oil. Field studies conducted in 1989 and 1990 showed increased rates of egg mortality and larval deformities in oiled versus unoiled areas. Laboratory studies confirm that these effects can be caused by exposure to *Exxon Valdez* oil, but the significance of these injuries in the field at a population level is not known.

In 1992, herring biomass in Prince William Sound was at a record level. In 1993, however, there was an unprecedented crash of adult herring. A viral disease and fungus were the probable agents of mortality, and the connection between the oil spill and the disease outbreak is under investigation. Numbers of spawning herring in Prince William Sound have remained depressed through the 1995 season. Pacific herring are extremely important ecologically as well as commercially, and the closure of the herring fishery from 1993 through 1995 has had serious economic impact on people and communities in Prince William Sound.

~~Pacific herring studies have demonstrated egg mortality and larval deformities. Populations may have declined, but there is uncertainty as to the full extent and mechanism of injury. However, the stocks and dependent fisheries in Prince William Sound are not healthy, as indicated by the~~

~~low spawning biomass in 1993 and 1994 and the resultant elimination of the fisheries in those years.~~

Recovery Objective

Pacific herring will have recovered when indicators of population health, such as reproduction, growth, and recruitment, are within normal bounds and free of oil-related effects within Prince William Sound. ~~populations are healthy and productive and exist at prespill abundances.~~

PIGEON GUILLEMOT

Injury and Recovery

Although the pigeon guillemot is widely distributed, nowhere does it occur in large numbers or concentrations. Because guillemots feed in shallow, nearshore waters, both they and the fish they prey on are vulnerable to oil pollution. Like the marbled murrelet, the pigeon guillemot population in Prince William Sound was in decline before the spill. The causes of the prespill decline are unknown. It is estimated that 10-15 percent of the Gulf of Alaska population may have died in the spill, and declines along oiled shorelines in Prince William Sound were greater than along unoiled shorelines. Numbers of guillemots recorded on boat surveys are highly variable, and there is not yet any statistically significant evidence of a postspill population increase. The factors responsible for the guillemot's prespill decline may negate or mask recovery from the effects of the oil spill.

Recovery Objective

Pigeon guillemots will have recovered when the populations in Prince William Sound is ~~are~~ stable or increasing.

PINK SALMON

Injury and Recovery

About 75 percent of wild pink salmon in Prince William Sound spawn in the intertidal portions of streams and were highly vulnerable to the effects of the oil spill. Hatchery salmon and wild salmon from both intertidal and upstream spawning habitats swam through oiled waters and ingested oil particles and oiled prey as they foraged in the sound and emigrated to sea. As a result, three types of early life-stage injuries were identified: First, growth rates in juvenile salmon from oiled parts of Prince William Sound were reduced. Second, there was increased egg mortality in oiled versus unoiled streams. A possible third effect, genetic damage, is under investigation.

In the years preceding the spill, returns of wild pink salmon in Prince William Sound varied from a maximum of 21.0 million fish in 1984 to a minimum of 1.8 million in 1988. Since the spill, returns of wild pinks have varied from a high of about 14.4 million fish in 1990 to a low of about 2.2 million in 1992. There is particular concern about the Sound's southwest district,

where returns of both hatchery and wild stocks have been generally weak since the oil spill. Because of the tremendous natural variation in adult returns, however, it is difficult to attribute poor returns in a given year to injuries caused by oil. Injuries to salmon eggs and juveniles remain the best indicators of injury and recovery.

Evidence of reduced juvenile growth rates was limited to the 1989 season, but increased egg mortality persisted in oiled compared to unoiled streams through 1993. The 1994 and 1995 seasons were the first since 1989 in which there were no statistically significant differences in egg mortalities in oiled and unoiled streams. These data indicate that recovery from oil-spill effects is underway.

The Sound Ecosystem Assessment (SEA) Project is exploring physical and biological oceanographic factors that influence production of salmon and herring. These natural factors are likely to have the greatest influence over year-to-year returns in both wild and hatchery stocks of pink salmon.

~~Pink salmon studies have demonstrated egg mortality, fry deformities, and reduced growth in juveniles. Populations may have declined, but there is uncertainty as to the full extent and mechanism of injury. However, there is evidence of continued damage in some stocks from exposure to oil, and there were unexpectedly poor runs of both wild and hatchery stocks of pink salmon in Prince William Sound in 1992 and 1993. In 1994, runs were still depressed but exceeded forecasts.~~

Recovery Objective

Pink salmon will have recovered when population indicators, such as growth and survival, are within normal bounds and there are no statistically significant differences in egg mortalities in oiled and unoiled streams for two years each of odd- and even-year runs in Prince William Sound. ~~populations are healthy and productive and exist at prespill abundance. An indication of recovery is when egg mortalities in oiled areas match prespill levels or levels in unoiled areas.~~

River Otters

Injury and Recovery

River otters have a low density and an unknown population size in Prince William Sound, and, therefore, it is hard to assess oil-spill effects. Twelve otter carcasses were found following the spill. Studies conducted during 1989-1991 identified several differences between otters in oiled and unoiled areas in Prince William Sound, including biochemical evidence of exposure to hydrocarbons or other sources of stress, reduced diversity in prey species, reduced body size (length-weight), and increased territory size. However, sample sizes were small, and it is not clear that these differences are the result of the oil spill. The Nearshore Vertebrate Predator project, now underway, will shed new light on the status of the river otters. In 1995 the Alaska Board of Game used its emergency authority to restrict trapping of river otters in western Prince William Sound to ensure that the results of this study are not compromised by the removal of

animals from study areas on Montague and Knight islands. ~~River otters in Prince William Sound have suffered sublethal effects from the spill and may continue to be exposed to hydrocarbons.~~

Recovery Objective

The river otter will have recovered when biochemical indices of hydrocarbon exposure or other stresses and indices of habitat use are similar between oiled and unoiled areas of Prince William Sound, after taking into account any geographic effects. ~~Indications of recovery are when habitat use, food habitats and physiological indices have returned to prespill conditions.~~

ROCKFISH

Injury and Recovery

Very little is known about rockfish populations in the northern Gulf of Alaska. Dead adult rockfish were recovered following the oil spill, and chemical analysis of five specimens indicated that oil ingestion was the cause of death. Analysis of other rockfish showed exposure ~~were exposed~~ to hydrocarbons and ~~showed~~ sublethal effects. ~~Furthermore~~ In addition, closures to salmon fisheries apparently increased fishing pressures on rockfish, which may have affected ~~be affecting their~~ the rockfish population. However, the original extent ~~and mechanism~~ of injury and the current status of ~~to~~ this species are unknown.

Recovery Objective

Without further study, a recovery objective cannot be defined.

SEA OTTERS

Injury and Recovery

Surveys of sea otters in the 1970s and 1980s indicate that the population was expanding and about 10,000 animals lived in Prince William Sound prior to the spill. Based on the number of carcasses and other data, population models suggest that 3,500-5,500 otters died in the first few months following the spill. In 1990 and 1991, unusual numbers of prime-age adult otters were found dead and there was evidence of an increased death rate in recently weaned juveniles. By 1992-93, mortality rates for juveniles had decreased, but were still higher in oiled than in unoiled parts of Prince William Sound. Boat surveys conducted in March and July in 1993 and again in 1994 indicated a population of about 7,700 otters in the Sound, but there was no statistically significant evidence of a population increase following the spill (1990-1994). The Nearshore Vertebrate Predator project, which was started in 1995, should help clarify the recovery status of the sea otter in Prince William Sound. ~~Sea otters do not appear to be recovering, but are expected to eventually recover to their prespill population. Exactly what population increases would constitute recovery is very uncertain, as there are no population data from 1986 to 1989, and the population may have been increasing in Eastern Prince William Sound during that time. In addition, only large changes in the population can be reliably detected with current measuring techniques. However, there are recent indications that the patterns of~~

~~juvenile and mid-aged mortalities are returning to prespill conditions.~~

Recovery Objective

Sea otters will have recovered when the Prince William Sound population returns to its prespill abundance and distribution. An increasing population trend and normal reproduction and age structure in oiled parts of the sound will indicate that recovery is underway. ~~Sea otters will be considered recovered when population abundance and distribution are comparable to prespill abundance and distribution, and when all ages appear healthy.~~

SEDIMENTS

Injury and Recovery

With tidal action, oil penetrated deeply into cobble and boulder beaches that are ~~relatively~~ common on ~~the rocky islands of~~ shorelines throughout the spill area, especially in sheltered habitats. Cleaning removed much of the oil from the intertidal zone but subsurface oil persisted in many heavily oiled beaches and associated subtidal sediments. ~~in mussel beds, which were avoided during the cleanup.~~ Subsurface oil persists at least at ___ locations in Prince William Sound and as far away as the Alaska Peninsula. While much of this oil is probably not biologically active, it is of great concern to residents in oil-spill communities, and there are sites where sheening still occurs.

Following the oil spill, chemical analyses of oil in sediments were conducted at a small number of index sites in Prince William Sound. At these sites, oil in sediments reached its greatest concentrations at water depths of 20 meters, although elevated levels of hydrocarbon-degrading bacteria (associated with elevated hydrocarbons) were detected at depths of 40 and 100 meters in 1990 in Prince William Sound. ~~Chemical analyses show that *Exxon Valdez* oil apparently did not reach deeper than 20 to 40 meters, although elevated activities of hydrocarbon-degrading bacteria were seen somewhat deeper in some cases.~~ By 1993, however, there was little evidence of *Exxon Valdez* oil and related microbial activity at most index sites in Prince William Sound, except at those associated with sheltered beaches that were heavily oiled in 1989. These index sites–at Herring, Northwest, and Sleepy bays–were among the ___ at which subsurface oiling is still known to occur (see above).

Recovery Objective

Sediments will have recovered when ~~contamination causes no negative effects to the spill ecosystem~~ residues of subsurface oil at sheltered sites that were previously heavily oiled are declining or are biologically harmless.

SOCKEYE SALMON

Injury and Recovery

Commericial fishing was closed in portions of Cook Inlet and near Kodiak in 1989 to avoid any possibility of contaminated salmon being sent to market. As a result, there were higher-than-usual numbers (i.e., overescapement) of spawning fish entering the Kenai River, Red and Akalura lakes on Kodiak Island, and other lakes on Afognak Island and the Alaska Peninsula. Initially these high escapements may have produced an overabundance of juvenile sockeye that consumed huge quantities of zooplankton, thus destroying planktonic food webs in the nursery lakes. Although the exact mechanism is unclear, the result was lost sockeye production as shown by declines in the returns of adults per spawning sockeye.

The effects of the 1989 overescapement have persisted in the Kenai River system through 1995. Although the overall escapement goal for that system was met in 1995, there is concern that the initial overescapement will continue to affect post-spill year-classes and that sockeye returns are yet not sufficient to fulfill the commericial, recreational, and subsistence demands on sockeye salmon in the Kenai River system.

Production of zoolplankton in both Red and Akalura lakes on Kodiak Island has returned to normal. There continues to be some problem in the rate of production of sockeye fry in Red Lake, which may or may not be linked to the overescapement at the time of the oil spill. Continuing low adult escapements at Akalura Lake are more likely the result of a mixed stock fishery harvest in the Kodiak vicinity than a result of the earlier overescapement.

~~Sockeye salmon in Red Lake, Akalura Lake, and lakes in the Kenai River system declined in population because of adult overescapement in 1989. The Red Lake system may be recovering because the plankton has recovered and fry survival improved in 1993. However, Akalura Lake and the Kenai River lakes have not recovered: smolt production has continued to decline from these lakes. In the Kenai River lakes, for example, smolt production has declined from 30 million in 1989 to 6 million in 1990 and to less than 1 million in 1992 and 1993.~~

Recovery Objective

Sockeye salmon in the Kenai River system and Red and Akalura lakes will have recovered when adult returns-per-spawner are within normal bounds. ~~affected lakes will have recovered when populations are able to support overwinter survival rates and smolt outmigrations comparable to prespill levels.~~

Subtidal Organisms

Injury and Recovery

Oil that was transported down to subtidal habitats apparently caused changes in the size and species composition of plant and animal populations below lower tides. Different habitats, including eelgrass beds, kelp beds, and deep water, were compared at oiled and unoiled sites. The greatest effects were detected at oiled sites with sandy sea bottoms under eelgrass beds, at which there were reduced numbers and diversity of helmet crabs, amphipods, and other

crustaceans and mollusks. There also were sublethal effects on the eelgrass itself. Organisms living in sediment at depths of 3-20 meters were especially affected. Some opportunistic, such as *Musculus* mussels, a variety of polychaetes, and juvenile cod, apparently increased in numbers at oiled sites. Differences in oiled and unoiled sites were less evident by 1993.

~~Certain subtidal organisms, like eelgrass and some species of algae, appear to be recovering. Other subtidal organisms, like leather stars and helmet crabs, showed little signs of recovery through 1991.~~

Recovery Objective

Subtidal communities will have recovered when community composition in oiled areas, especially in association with eelgrass beds, is similar to that which would have prevailed in the absence of the spill. Indications of recovery are the return of keystone species, such as certain amphipods and other oil-sensitive crustaceans. ~~Subtidal communities will have recovered when the community composition, age-class distribution, population abundance of component species, and ecosystem functions and services in each injured subtidal habitat have returned to levels that would have prevailed in the absence of the oil spill.~~

Services

Commercial Fishing

Injury and Recovery

Commercial fishing is a service that was injured through injury to commercial fish species (see individual resources) and also through fishing closures. In 1989, closures affected fisheries in Prince William Sound, lower Cook Inlet, upper Cook Inlet, Kodiak, and Chignik. These fisheries opened again in 1990. Since then, there have been no spill-related district-wide closures, except for the Prince William Sound herring fishery, which was closed in 1993 and has remained closed since then due to the collapse of the herring population. These closures, including the on-going closure of the herring fishery in Prince William Sound, harmed the livelihoods of persons who fish for a living and the communities in which they live. To the extent that the oil spill continues to be a factor that reduces opportunities to catch fish, there is on-going injury to commercial fishing as a service.

On this basis, the Trustee Council continues to make major investments in projects to understand and restore commerically important fish species that were injured by the oil spill. These projects include: supplementation work, such as fertilizing Coghill Lake to enhance its sockeye salmon run and construction of a barrier bypass at Little Waterfall Creek; development of tools that have almost immediate benefit for fisheries management, such as otolith mass marking of pink salmon in Prince William Sound and in-season genetic stock identification for sockeye salmon in Cook Inlet; and research such as the SEA Project and genetic mapping which will enhance the ability to predict and manage fisheries over the long-term.

~~Continuing injuries to commercial fishing may cause hardships for fishermen and related businesses. Each year that commercial fishing remains below prespill levels compounds the injury to the fishermen and, in many instances, the communities in which they live or work.~~

~~The Trustee Council recognizes the impact to communities and people of the Prince William Sound region resulting from the sharp decline in pink salmon and herring fisheries in past years. In 1994, the Trustee Council committed over six million dollars to help address these issues through the development of an ecosystem-based study for Prince William Sound. Some of the pink salmon and herring problems may be unrelated to the spill. However, the Council will continue to address these important problems.~~

Recovery Objective

Commercial fishing will have recovered when the commercially important fish species have recovered and opportunities to catch these species are not lost or reduced due to effects of the oil spill. population levels and distribution of injured or replacement fish used by the commercial fishing industry match conditions that would have existed had the spill not occurred. Because of the difficulty of separating spill-related effects from other changes in fish runs, the Trustee Council may use prespill conditions as a substitute measure for conditions that would have existed had the spill not occurred.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

The primary method for restoring commercial fishing is to restore the species that are fished commercially, such as pink salmon, Pacific herring, and sockeye salmon. These species are discussed elsewhere in this chapter. Three additional parts of the strategy for restoring commercial fishing are the following:

Promote recovery of commercial fishing as soon as possible. Many communities that rely on commercial fishing will be significantly harmed while waiting for commercial fish resources to recover through natural recovery alone. Therefore, an objective of restoration is to accelerate recovery of commercial fishing. This objective may be accomplished through increasing availability, reliability, or quality of commercial fish resources, depending on the nature of the injury. For resources that have sharply declined since the spill, such as pink salmon, and Pacific herring in Prince William Sound, this objective may take the form of increasing availability in the long run through improved fisheries management. Another example is providing replacement fish for harvest.

Protect commercial fish resources from further degradation. Further stress on commercial fish resources could impede recovery. Appropriate protection can take the form of habitat protection and acquisition if a resource faces loss of habitat. The Trustee Council can also contribute to the protection of commercial fish species by providing information needed to improve their management.

Monitor recovery. Monitoring the recovery of commercial fishing will track the progress of

recovery, detect major reversals, and identify problems with the resources and resource management that may affect the rate or degree of recovery. Inadequate information may require managers to unduly restrict use of the injured resources, compounding the injury to commercial fishing.

Passive Use

Injury and Recovery

Passive use of resources includes the appreciation of the aesthetic and intrinsic values of undisturbed areas, the value derived from simply knowing that a resource exists, and other nonuse values. Injuries to passive uses are tied to public perceptions of injured resources. [NOTE: THIS SAYS ALMOST NOTHING ABOUT INJURY. IS THERE ANYTHING TO SAY? PERHAPS A REFERENCE TO THE VALUATION SURVEYS DONE FOLLOWING THE SPILL?]

Recovery Objective

Passive uses will have recovered when people perceive that aesthetic and intrinsic values associated with the spill area are no longer diminished by the oil spill.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

Any restoration strategy that aids recovery of injured resources, or prevents further injuries, will assist recovery of passive use values. No strategies have been identified that benefit only passive uses, without also addressing injured resources. Since recovery of passive uses requires that people know when recovery has occurred, the availability to the public of the latest scientific information will continue to play an important role in the restoration of passive uses.

Recreation and Tourism

Injury and Recovery

The spill disrupted use of the spill area for recreation and tourism. Resources important for wildlife viewing and which are still injured by the spill include killer whale, sea otter, harbor seal, ~~bald eagle,~~ and various seabirds. Residual oil exists on some beaches with high value for recreation, and its presence may decrease the quality of recreational experiences and discourage recreational use of these beaches.

Closures of sport hunting and fishing also affected use of the spill area for recreation and tourism. Sport fishing resources include salmon, rockfish, Dolly Varden, and cutthroat trout. The Alaska Board of Fisheries restricted sport harvest of cutthroat trout in Prince William Sound in 1991 [?], and those restrictions remain in place. Harlequin ducks are hunted in the spill area. The Alaska Board of Game restricted sport harvest of harlequin ducks in Prince William Sound in 1991, and those restrictions remain in place.

Recreation was also affected by changes in human use in response to the spill. For example, displacement of use from oiled areas to unoiled areas increased management problems and facility use in unoiled areas. Some facilities, such as the Green Island cabin and the Fleming Spit camp area, were injured by clean-up workers.

In the years since the oil spill, there has been a general, marked increase in visitation to the spill area. There are still locations within the oil-spill area, however, avoided by recreational users because of the presence of residual oil.

Recovery Objective

Recreation and tourism will have recovered, in large part, when the fish and wildlife resources on which they depend have recovered, recreation use of oiled beaches is no longer impaired, and facilities and management capabilities can accommodate changes in human use.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

Preserve or improve the recreational and tourism values of the spill area. Habitat protection and acquisition are important means of preserving and enhancing the opportunities offered by the spill area. Facilities damaged during cleanup may be repaired if they are still needed. New facilities may restore or enhance opportunities for recreational use of natural resources. Improved or intensified public recreation management may be warranted in some circumstances. Projects that restore or enhance recreation and tourism would be considered only if they are consistent with the character and public uses of the area. However, all projects to preserve and improve recreation and tourism values must be related to an injured natural resource. See Policy 9 in Chapter 2.

Remove or reduce residual oil if treatment is cost effective and less harmful than leaving the oil in place. Removal of residual oil from beaches with high value for recreation and tourism may restore these services for some users. However, this benefit would have to be balanced against cost and the potential for further disruption to intertidal communities.

Monitor recovery. Monitor the recovery of resources used for recreation and tourism. Also monitor changes in recreation and tourism in the spill area.

SUBSISTENCE

Injury and Recovery

Before the oil spill, the Alaska Department of Fish and Game had documented 15 Native Alaskan communities (with about 2,200 people) in Prince William Sound, lower Cook Inlet, Kodiak, and the Alaska Peninsula that relied heavily on subsistence resources, such as fish, shellfish, seals, deer, and waterfowl. Per capita subsistence harvest ranged from nearly 200 pounds to more than 600 pounds per year. Subsistence harvests of fish and wildlife in most of these villages declined substantially following the oil spill. The reasons for these declines included reduced

availability of fish and wildlife to harvest, concern about possible health effects of eating contaminated or injured fish and wildlife, and disruption of lifestyles due to clean-up and other activities.

Subsistence foods were tested for evidence of hydrocarbon contamination during 1989-1994, and the results indicated that most resources contained no or very low concentrations of petroleum hydrocarbons. Eating foods with low levels of hydrocarbons posed no risk to human health, although subsistence users were advised not to eat shellfish from obviously contaminated areas. Samples of ducks from the Chenega Bay area in 1994 showed that exposure to crude oil had decreased significantly compared to the exposure levels documented since 1990.

Residual oil exists on some beaches near subsistence communities, and, in general, there continues to be concern or at least uncertainty about the safety of fish and wildlife resources. Uncertainty about the safety of resources reduces their use and value for subsistence.

Surveys by the Alaska Department of Fish and Game indicate that in some communities subsistence resources appear to be harvested at prespill levels based on total pounds-per-person. It is important to note, however, that the composition of many diets has shifted to include more fish and fewer seals. Diet composition continues to be a serious concern to subsistence users.

Subsistence users say that maintaining their subsistence culture depends on uninterrupted use of fish and wildlife resources. The more time users spend away from subsistence activities, the less likely that they will return to these practices. Continuing injury to natural resources used for subsistence may affect the way of life of entire communities. There is particular concern that the oil spill disrupted opportunities for young people to learn subsistence culture, and that this knowledge may be lost to them in the future.

Recovery Objective

Subsistence will have recovered when injured resources used for subsistence are healthy and productive and exist at prespill levels. In addition, there is recognition that people must be ~~and when people are~~ confident that the resources are safe to eat~~. One indication that recovery has occurred is when~~ and that the cultural values provided by gathering, preparing, and sharing food need to be ~~are~~ reintegrated into community life.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

The primary way of restoring subsistence is to restore injured resources used for subsistence, such as clams, harbor seals, Pacific herring, pink salmon, sea otters, and sockeye salmon. These are discussed elsewhere in this chapter. Four additional parts of the strategy to restore subsistence are the following:

Promote recovery of subsistence as soon as possible. Many subsistence communities will be significantly harmed while waiting for resources used for subsistence to recover through natural recovery alone. Therefore, an objective of restoration is to accelerate recovery of subsistence use. This objective may be accomplished through increasing availability, reliability, or quality of resources used for subsistence, or increasing the confidence of subsistence users. Specifically, if subsistence harvest has not returned to prespill levels because users doubt the safety of particular resources, this objective may take the form of increasing the reliability of the resource through food safety testing. Other examples are the acquisition of alternative food sources and improved use of existing resources. However, all projects to promote subsistence must be related to an injured natural resource. See Policy 9 in Chapter 2.

Remove or reduce residual oil if treatment is cost effective and less harmful than leaving the oil in place. Removing residual oil from beaches with high value for subsistence may improve the safety of foods found on these beaches. This benefit would have to be balanced against cost and the potential for further disruption to intertidal communities.

Protect subsistence resources from further degradation. Further stress on subsistence resources could impede recovery. Appropriate protection can take the form of habitat protection and acquisition if important subsistence areas are threatened. Protective action could also include protective management practices if a resource or service faces further injury from human use or marine pollution.

Monitor recovery. Monitor the recovery of resources used for subsistence. Also monitor subsistence harvest.

State of Alaska

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NEWS RELEASE

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FOR IMMEDIATE RELEASE: December 29, 1995 95-288

DEC COMMISSIONER GENE BURDEN TO STEP DOWN

Knowles Praises Tenure at Department

Praising his work to resolve issues that are critical for Alaska's environment and economy, Governor Tony Knowles said today that he reluctantly accepted the resignation of Gene Burden, commissioner of the Department of Environmental Conservation (DEC). Burden today announced his intent to step down effective January 15, citing family reasons.

Appointed Dec. 22, 1994, Burden was among the first commissioners named to Knowles' cabinet. The former Tesoro executive was chosen for his ability to forge partnerships between industry and public interest groups, a skill that was called on frequently as commissioner.

Gene Burden has done an absolutely tremendous job in this department, exactly what I expected of him, Knowles said. He used his skills to bring together widely divergent views on water quality and succeeded in reaching consensus where some thought it was impossible.

He was vigilant in watching over oil transportation issues - keeping our state economy moving while protecting our air and water, Knowles added. And he steered his department through a major reorganization, putting together a solid management team. He's leaving a stronger department than he inherited.

I accept his resignation with thanks for his hard work and dedication, Knowles said. I intend to continue to tap Gene's talents in some capacity in the future.

It is with many regrets that I step down at this time, Burden said. I am proud of DEC's achievements over the past year and believe that Governor Knowles is headed in the right direction in seeking ways to resolve the many complex issues that face the state of Alaska. I am confident the Administration and the dedicated workers at DEC will meet the challenges that lie ahead.

Announcement of a successor is expected prior to Burden's departure.

-30-

Exxon Valdez Oil Spill Trustee Council
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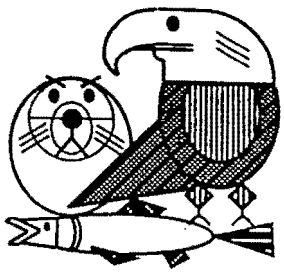


MEMORANDUM

To: Restoration Work Force
Agency Liaisons
Legal Counsel

From: Molly McCammon
Executive Director

Re: Preliminary Revised Draft of Chapter 5 (Recovery Objectives)

Date: December 29, 1995

Pages 5 and 32 of the Restoration Plan note that the plan is a dynamic document, subject to updating based on new information. On that basis, I have attached for your review a preliminary revised draft of Chapter 5 of the Restoration Plan. The next step in this process is for agency staff to review this at a macro level in order to identify areas where you believe there may be significant errors in fact or concept. It would be helpful if you could return your comments to Stan Senner by January 9, the date of the next meeting of the Restoration Work Force.

Based on your comments and concerns, we will produce another, revised draft, which will be distributed to participants in the 1996 Restoration Workshop. This draft will be among the materials handed out at the workshop registration table on January 16th.

These revised recovery objectives will be discussed at the workshop in breakout sessions on Thursday, January 18th, and with the core peer reviewers before they leave Anchorage. Based on this feedback, the Restoration Office staff will then make additional revisions and copies will be circulated to you and the Trustees. I will looking for the Trustees' "informed consent" so that this can be sent out for public comment in February, along with the FY 1997 Invitation. Following public comment, a final version will be prepared for Trustee Council action, probably at the same time as they consider the FY 1997 Work Plan.

The primary focus of this revised Chapter 5 is on Injury Status and Recovery Objectives. We propose to delete the generic discussion of strategies, which is badly out of date, as well as the resource-specific strategies, which are better covered (and updated) through the annual Invitations. We propose to retain the strategies for the

services, although they may still need to be revised. With respect to the status of Injury and Recovery, the discussion for each resource is opened with a statement or two of context and a description of why the resource or service originally was considered to be injured. Each discussion is closed with a few sentences regarding current status. In regard to the Recovery Objectives, the goal was to identify a goal that is realistic and measurable, given what we know about a resource or service's current status.

An earlier draft of this document was reviewed by Dr. Spies and the core peer reviewers, but please identify where more work may be needed. Do not worry now about editorial details, although such comments are always welcome. Thank you for your help with this. Give Stan or me a call if you have any questions.

enclosure (1)

cc: Robert Spies
Core peer reviewers

29 Dec 95
DRAFT

Table 1. Resources and Services Injured by the Spill

INJURED RESOURCES

Recovered

~~Bald eagle~~

Recovering

~~Bald eagle~~
~~Black oystercatcher~~
~~Common murre~~
Intertidal organisms
~~(some)~~ ~~(everything)~~
~~Killer whale~~
Mussels
~~Pink salmon~~
Sockeye salmon
~~(Red Lake)~~ ~~(all systems)~~
Subtidal organisms
~~(some)~~ ~~(everything)~~

Not Recovering

~~Common murre~~
Harbor seal
Harlequin duck
~~Intertidal organisms~~
~~(some)~~
~~Killer whale~~
~~(AB pod)~~
Marbled murrelet
Pacific herring
Pigeon guillemot
~~Pink salmon~~
Sea otter
~~Sockeye salmon~~
~~(Kenai & Akalura systems)~~
~~Subtidal organisms~~
~~(some)~~
~~Archaeological resources~~
~~Sediment~~

Recovery Unknown

Clams - ?
Common loon
Cutthroat trout
Black oystercatcher
Dolly Varden
Kittlitz's murrelet
River otter
Rockfish

Other

Archaeological resources
Designated wilderness areas
Sediments

Services

Commercial fishing
Passive uses
Recreation and Tourism
Subsistence

29 Dec 1995
DRAFT

Chapter 5
~~Goals, Objectives, and Strategies~~
Injury Status and Recovery Objectives

~~This chapter presents goals, objectives, and strategies for restoration.~~ The first part of this chapter discusses ~~goals,~~ recovery objectives~~, and strategies~~ in general. The second part describes the nature and extent of injury and recovery and ~~the~~ recovery objective~~, and the restoration strategy~~ for each injured resource and service discussed in Table 2 in Chapter 4. Detailed information on injury and recovery objectives~~, and strategies~~ can be found on the following pages:

Overview

The first part of this chapter discusses goals, objectives, and strategies in general. A goal is the end toward which an endeavor is directed; objectives are descriptions of measurable outcomes; and strategies are plans of action. Taken together, goals, objectives, and strategies produce a blueprint for restoring the spill area. To be funded, a project must be consistent with the goals and policies of the Restoration Plan and with restoration objectives and strategies as they change over time.

GOAL: *The end toward which restoration is directed*

The goal of restoration is recovery of all injured resources and services. Recovery is to be sustained by healthy, productive ecosystems that maintain naturally occurring biodiversity. All restoration actions must be directed toward this goal.

OBJECTIVES: *Measurable outcomes of restoration*

Objectives

The recovery objectives described in the following section of the restoration program are the measurable conditions that signal the recovery of individual resources or services. They are the yardsticks against which the success of the program is measured. In general, resources and services will have recovered when they return to conditions that would have existed had the spill not occurred. In nature, however, populations often undergo large natural changes, and Because it is difficult to predict conditions that would have existed in the absence of the spill. recovery is often Recovery, therefore, is most realistically defined as a return to prespill conditions or to levels that fall within the bounds of natural variation. For resources that were in decline before the spill, like harbor seals marbled murrelets, recovery may be achieved consist of stabilizing the when a population is stabilized, even if at a lower level than before the spill. For some resources, little is known about their injury and recovery status, so it is difficult to define recovery.

Where few little prespill data exist, injury is inferred from comparisons of oiled and unoiled areas, and recovery is usually defined as a return to conditions comparable to those of unoiled areas. Because the differences between oiled and unoiled areas may have existed before the spill, statements of injury and objectives based on these differences are often less certain than in those cases where prespill data exist. Alternatively, injury may be evaluated based on the number of oiled carcasses picked up following the spill relative to the estimated size of the spill-area population. Even in cases where some prespill data are available, However, there also is can be some uncertainty associated with interpreting the significance of prespill population data since populations undergo natural fluctuations. In all cases, indicators of recovery can include increased numbers of individuals, reproductive success, improved growth and survival rates, and normal age and sex composition of the injured population.

Full ecological recovery will have been achieved when the population of flora and fauna are

again present at former or prespill abundances, are healthy and productive, and there is a full complement of age classes at the level that would have been present had the spill not occurred. A recovered ecosystem provides the same functions and services as would have been provided had the spill not occurred.

[NOTE: WE PROPOSE TO ELIMINATE THE FOLLOWING GENERIC DISCUSSION OF STRATEGIES, AS WELL THE DISCUSSION OF SPECIFIC STRATEGIES FOR EACH INJURED RESOURCE (BUT NOT FOR SERVICES). THIS STUFF IS PROBABLY BEST COVERED THROUGH THE INVITATIONS, WHERE IT IS UPDATED ANNUALLY. IN ADDITION, SOME OF THE MORE GENERIC DISCUSSION IS ALREADY COVERED IN CHAPTER 3 OF THE RESTORATION PLAN. IF WE WERE TO RETAIN THIS MATERIAL, IT WOULD REQUIRE SUBSTANTIAL REVISION.]]

~~STRATEGIES: *Plans of action*~~

~~A restoration strategy is a plan of action for achieving objectives. Each year, through its annual or multiyear work plan, the Trustee Council decides which strategies to implement. Restoration strategies reflect consideration of ecosystem relationships. For example, the strategy for some injured resources includes research into why they are not recovering, such as declining or contaminated food sources or disruption of ecosystem relationships.~~

~~In this section, restoration strategies are presented under three headings: Biological Resources, Other Resources, and Services.~~

~~**Biological Resources**~~

~~Because restoration strategies for biological resources depend on whether the resource is recovering, strategies are subdivided into those for recovering resources, resources that are not recovering, and resources whose recovery is unknown.~~

~~***Recovering Resources.*** The fact that a resource is recovering suggests that nature will restore it without intervention. Consequently, restoration of recovering resources will rely primarily on natural recovery.~~

~~Because these resources are recovering, research into factors limiting recovery and general restoration projects to accelerate recovery may not be warranted. However, if a resource is not expected to recover fully on its own or if waiting for natural recovery will cause long-term harm to a community or service, appropriate alternative means of restoration would be undertaken. Habitat protection and monitoring are encouraged, as are general restoration projects that protect the resource from other sources of potential injury. (Restoration strategies under "Services" also apply to these resources.)~~

~~The restoration strategy for recovering resources has three parts:~~

- ~~Rely on natural recovery~~
- ~~Monitor recovery~~

- Protect injured resources and their habitats

Resources Not Recovering. Except for certain protective measures, attempts to restore these resources without knowing why they are not recovering may be ineffectual or even detrimental. For this reason, the restoration strategy for these resources emphasizes determining why they are not recovering, and eliminating threats to the remaining populations.

Where sufficient knowledge about the nature of injury exists, the restoration strategy also encourages actions to promote recovery. The populations of some of these resources are in a steep decline and may not recover without help. Furthermore, some of these resources have subsistence or economic importance and their recovery is linked to the recovery of these services. (Restoration strategies under "Services" also apply to these resources.)

Research is encouraged, provided it helps explain why a resource is not recovering. Habitat protection and monitoring are also encouraged. General restoration projects are allowed if they address factors limiting recovery or if they protect the resource from other sources of potential injury.

The restoration strategy for resources that are not recovering has four parts:

- Conduct research to find out why these resources are not recovering
- Initiate, sustain, or accelerate recovery
- Monitor recovery
- Protect injured resources and their habitats

Recovery Unknown. If specialists do not know whether a resource is recovering, it will be treated in much the same way as a recovering resource. Until more is known about the nature and extent of injuries and the degree of recovery of these resources, restoration will rely primarily on natural recovery, aided by monitoring and protective measures.

Because the recovery of these resources is unknown, and, in some cases, the injury poorly understood, research into factors limiting recovery and general restoration projects to accelerate recovery may not be warranted. Habitat protection and monitoring are encouraged, as are general restoration projects that protect these resources from other sources of potential injury.

The restoration strategy for resources whose recovery is unknown has three parts:

- Rely on natural recovery
- Monitor recovery
- Protect injured resources and their habitats

Other Resources

Other injured resources include archaeological resources, designated wilderness areas and oiled sediment. The strategy for restoring archaeological resources seeks to repair and protect injured

~~sites and artifacts. The strategy for sediment includes removal or reduction of residual oil and monitoring. Any restoration strategy that aids recovery of injured resources, or prevents further injuries, will assist recovery of designated wilderness areas or wilderness study areas.~~

~~**Services**~~

~~Commercial fishing, passive use, recreation (including sport fishing) and tourism and subsistence are services that were reduced or lost because of the spill. Injured resources that support these services include clams, harbor seals, Pacific herring, pink salmon, sea otters, and sockeye salmon. The primary way to restore services is to restore the resources on which they depend.~~

~~Additional restoration strategies for commercial fishing, recreation and tourism, and subsistence include promoting recovery of the service as soon as possible through such means as increasing the availability, reliability, or quality of the resource on which the service depends. For some resources, this may take the form of increasing availability in the long run through improved resource management or providing replacement resources. Strategies for recreation and tourism and subsistence also include removing or reducing residual oil if treatment is cost effective and less harmful than leaving the oil in place.~~

~~Objectives and Strategies by Resource and Service~~ Injury Status and Recovery Objective

This section describes the nature and extent of injury and recovery and the recovery objective~~, and the restoration strategy~~ for each injured resource and service. Specific strategies to achieve recovery objectives are described in annual work plans and restoration project invitations (e.g., *Invitation to Submit Restoration Projects for Federal Fiscal 1997 and Draft Restoration Program: FY 97 and Beyond).* The information in this section is expected to change ~~over time~~ as the restoration program adapts to new information. For example, population declines or sublethal effects may be documented for new resources, some resources may begin to recover or never recover, and recovery objectives ~~and strategies may~~ will change in response to new information and conditions. Hypotheses for why resources are not recovering are particularly susceptible to change as prevailing hypotheses are tested and new ones are formed.

New scientific data will be incorporated into restoration decisions without the need to change the plan. However, changes will be reported in the Trustee Council's annual status report.

Resources

Archaeological Resources

Injury and Recovery

Twenty-four archaeological sites on public lands are known to have been adversely affected by cleanup activities, or looting and vandalism linked to the oil spill. Additional sites on private land

may have been injured, but damage assessment studies were limited to public land.

Documented injuries include theft of surface artifacts, masking of subtle clues used to identify and classify sites, violation of ancient burial sites, and destruction of evidence in layered sediments. In addition, vegetation has been disturbed, which has exposed sites to accelerated erosion. The effect of oil on soil chemistry and organic remains may reduce or eliminate the utility of radiocarbon dating in some sites.

Assessments of 14 sites in 1993 suggest that most of the archaeological vandalism that can be linked to the ~~*Exxon Valdez* oil~~ spill occurred in 1989 before adequate constraints were put into place over the activities of oil spill clean-up personnel. Most vandalism took the form of "prospecting" for high yield sites. In 1993, only two of the 14 sites visited showed signs of continued vandalism, ~~and the link between~~ but it is difficult to prove that this recent vandalism was related to the spill. ~~and the *Exxon Valdez* oil spill remains highly problematical~~. Oil ~~samples have not yet been analyzed, but oil~~ was visible in the intertidal zones of two of the 14 sites monitored in 1993, but because oil samples have not yet been analyzed, the *Exxon Valdez* oil spill cannot be confirmed as the source of the oil in these sites.

Monitoring of archaeological sites in 1994 and 1995 found no evidence of new damage from vandalism. The presence of oil is being determined in sediment samples taken from four sites in 1995.

None of the archaeological artifacts collected during the spill response, damage assessment, or restoration programs is stored within the spill area. These artifacts are stored in the University of Alaska Museum in Fairbanks and in the Federal Building in Juneau. Native communities in the spill area have expressed a strong interest in having them returned to the spill area for storage and display.

The Alutiiq Archaeological Repository in Kodiak, whose construction costs were partly funded by the Trustee Council, is the only physically appropriate artifact storage facility in the spill area. In 1995 the Trustee Council approved funds for development of a comprehensive community plan for restoring archaeological resources in Prince William Sound and lower Cook Inlet, including strategies for storing and displaying artifacts at appropriate facilities within the spill area.

Recovery Objective

Archaeological resources are nonrenewable: they cannot recover in the same sense as biological resources. Archaeological resources will be considered to have recovered when spill-related injury ends, looting and vandalism are at or below prespill levels, and the artifacts and scientific data which remain in vandalized sites are preserved (e.g., through excavation, site stabilization, or other forms of documentation). ~~Artifacts and data are typically preserved through excavation or other forms of documentation, or through site stabilization, depending on the nature of the injury and the characteristics of the site.~~

Bald Eagles

Injury and Recovery

Prince William Sound provided year-round and seasonal habitat for about 5,000 bald eagles. ~~Two hundred to 300~~ About 250 bald eagles are estimated to have died as a result of ~~may have been killed in~~ the spill, and productivity was reduced in oiled areas of Prince William Sound ~~in~~ 1989. Productivity was back to normal in 1990 and 1991, and an aerial survey of adults in 1995 indicated that the population has returned to or exceeded its prespill level in Prince William Sound. ~~However, population estimates made in 1989, 1990, and 1991 indicate that there may have been an increase in the Prince William Sound bald eagle population since the previous survey conducted in 1984. Productivity decreased in 1989, but appeared to have recovered by 1990. Because population and productivity appear to have returned to prespill levels, bald eagles may have already recovered from the effects of the spill.~~

Recovery Objective

Because the Prince William Sound population and productivity are at or above prespill levels, the bald eagle has recovered from the effects of the Exxon Valdez oil spill. ~~Bald eagles will have recovered when their population and productivity return to prespill levels.~~

Black Oystercatchers

Injury and Recovery

Black oystercatchers spend their entire lives in or near intertidal habitats and are highly vulnerable to oil pollution. An estimated 1,500-2,000 oystercatchers live in south-central Alaska. Only nine carcasses of adult oystercatchers were recovered following the spill, but estimated mortality may have been as high as, but probably did not exceed, 20 percent in the spill area. In addition, breeding activities were disrupted by the oil and clean-up activities. In comparison with oystercatchers on the largely unoiled Montague Island, oystercatchers at heavily oiled Green Island had reduced hatching success in 1989 and their chicks gained weight more slowly during 1991-93. Interpretation of these data on reproductive performance, however, are confounded by lack of pre-spill data. Productivity and survival of black oystercatchers in Prince William Sound have not been monitored since 1993, and the recovery status of this species is not currently known. ~~Within Prince William Sound, an estimated 120 to 150 black oystercatchers, representing 12-15 percent of the total estimated population, died as a result of the spill. Mortality outside of Prince William Sound is unknown. Black oystercatchers are recovering, although they may still be exposed to hydrocarbons when feeding in intertidal areas.~~

Recovery Objective

Black oystercatchers will have recovered when the Prince William Sound population returns to ~~attain~~ prespill levels and reproduction is normal. An increasing population trend and comparable

hatching success and growth rates of chicks in oiled and unoiled areas will indicate that recovery is underway. ~~reproductive success of nests and growth rates of chicks raised in oiled areas are comparable to those in unoiled areas.~~

CLAMS

Injury and Recovery

The magnitude of impacts on clam populations varies with the species of clam, degree of oiling, and location. However, data from the lower intertidal zone on sheltered beaches suggest that little-neck clams and, to a lesser extent, butter clams ~~on sheltered beaches~~ were killed or suffered slower growth rates as a result of the oil spill ~~by oiling~~ and clean-up activities. ~~In addition, growth appeared to be reduced by oil, but determination of sublethal or chronic effects is awaiting final analyses.~~ In communities on the Kenai Peninsula, Kodiak, and Alaska Peninsula, concern about the effects of the oil spill on clams and subsistence uses of clams remains high.

Recovery Objective

Based on prespill data or comparisons of oiled and unoiled sites, clams will have recovered when populations and productivity have returned to levels that would have prevailed in the absence of the oil spill ~~(prespill data or unoiled control sites)~~.

COMMON LOONS

Injury and Recovery

Carcasses of 395 loons of four species were recovered following the spill, including at least 216 common loons. The population sizes are not known for any of these species, but, in general, loons are long-lived, slow-reproducing, and have small populations. Common loons in the oil-spill area may number only a few thousand, including only hundreds in Prince William Sound. Common loons injured by the spill probably included a mixture of resident and migrant birds, and their recovery status is not known.

Recovery Objective

Without more information on injury to common loons and their recovery status, no recovery objective can be identified.

COMMON MURRES

Injury and Recovery

About 30,000 carcasses of oiled birds were picked up following the oil spill, and 74 percent of them were common and thick-billed murres (mostly common murres). Many more murres died than were actually recovered, and it is estimated that the spill-area population declined by about 40 percent, including at colonies at Resurrection Bay, the Chiswell, Barren, and Triplet islands,

and Puale Bay. In addition to direct losses of murres, there was evidence that the timing of reproduction was disrupted and productivity reduced. Interpretation of the effects of the spill, however, is complicated by incomplete prespill data and by indications that populations at some colonies were in decline before the oil spill.

Postspill monitoring of productivity at index colonies indicates that reproductive timing and success were again within normal bounds by 1993. Numbers of adult murres were last surveyed in 1994 [check] and, at that time, had not returned to prespill levels.

~~Productivity of common murres shows signs of recovery at some injured colonies (Barren Islands, Puale Bay) but postspill population counts are still lower than prespill estimates and show no sign of recovery.~~

Recovery Objective

Common murres will have recovered when populations ~~trends are increasing significantly~~ at index colonies have returned to prespill levels and when productivity is sustained within normal bounds. ~~in the spill area and when reproductive timing and success are (Normal bounds will be determined by comparing productivity data with information from other murre colonies in the Gulf of Alaska and elsewhere.)~~

Cutthroat Trout

Injury and Recovery

Prince William Sound is at the northwestern limit of the range of cutthroat trout, and few stocks are known to exist within the sound. Local cutthroat populations rarely number more than 1,000 each, and the fish have small home ranges and are geographically isolated. Cutthroat trout, therefore, are highly vulnerable to exploitation, habitat alteration, or pollution. Following the oil spill, cutthroat trout in a small number of oiled index streams grew more slowly than in unoiled streams, possibly as a result of reduced food supplies or exposure to oil, and there is concern that reduced growth rates may reflect reduced survival. The difference in growth rates persisted through 1991. No studies have been conducted since then, and the recovery status of this species is not known. ~~Cutthroat trout have grown more slowly in oiled areas than in unoiled areas. Insufficient data are available to determine whether they are recovering.~~

Recovery Objective

Cutthroat trout will have recovered when growth rates within oiled areas are comparable to those for unoiled areas, after taking into account geographic effects.

Designated Wilderness Areas

Injury and Recovery

The oil spill delivered oil in varying quantities to the waters adjoining the seven areas within the spill area designated by Congress as wilderness areas and wilderness study areas. Oil also was deposited above the mean high-tide line in these areas. During the intense clean-up seasons of 1989 and 1990, thousands of workers and hundreds of pieces of equipment were at work in the spill area. This activity was an unprecedented imposition of people, noise, and activity on the area's undeveloped and normally sparsely occupied landscape. Although activity levels on these wilderness shores have probably returned to normal, but at some locations there is still residual oil.

Recovery Objective

Designated wilderness areas will have recovered when oil is no longer encountered in these areas and the public perceives them to be recovered from the spill.

DOLLY VARDEN

Injury and Recovery

Like the cutthroat trout, there was evidence that Dolly Varden ~~have grown~~ grew more slowly in oiled streams ~~areas~~ than in unoiled streams ~~areas~~, and there is concern that reduced growth rates reflect reduced survival. However, no data have been gathered since 1991, and the recovery status of this species is not known. ~~Insufficient data are available to determine whether they are recovering.~~

Recovery Objective

Dolly Varden will have recovered when growth rates within oiled streams ~~areas~~ are comparable to those ~~for~~ in unoiled streams ~~areas~~, after taking into account geographic effects.

Harbor Seals

Injury and Recovery

Harbor seal numbers were declining in the Gulf of Alaska, including in Prince William Sound, before the spill. An estimated 300 seals died in the sound as a direct result of the spill, and this was 6-15 percent of the prespill population. Postspill surveys in 19__ showed that seals in ~~the~~ oiled areas had declined ~~by~~ 43 percent, compared to 11 percent in ~~the~~ unoiled areas. Unfortunately, seals in both oiled and unoiled parts of Prince William Sound have continued to decline since the spill at an annual rate of about 6 percent. Possible factors for this long-term decline include disease and the amount or quality of food. ~~Counts made during the molt at trend count sites in Prince William Sound from 1990 to 1993 indicate that numbers may have stabilized. However, counts during pupping have continued to decline. It is not known which counts are the best indicator of population status. If the conditions that were causing the population to decline before the spill have improved, normal growth may replace the animals that were lost. However, if conditions continue to be unfavorable, the affected population may~~

~~continue to decline.~~ Harbor seals are a key subsistence resource in the oil spill area ~~Prince William Sound~~. Subsistence hunting is ~~both~~ affected by the declining seal population and, in turn, may be affecting the recovery of harbor seals ~~status~~.

Recovery Objective

Recovery will have occurred when harbor seal population trends are stable or increasing.

HARLEQUIN DUCKS

Injury and Recovery

Harlequin ducks feed in intertidal and shallow subtidal habitats where most of the spilled oil was initially stranded. More than 200 harlequin ducks were found dead in 1989, mostly in Prince William Sound, and many more than that actually died throughout the spill area. Bile samples from harlequin ducks collected in eastern and western Prince William Sound in 1989-90 had higher concentrations of hydrocarbon metabolites than samples from harlequins collected at Juneau. Prespill data on harlequin populations and productivity are poor and complicated by possible geographic differences in habitat quality. However, the summer population in Prince William Sound is small, only a few thousand birds, and there continues to be concern about poor reproduction and a possible decline in numbers of molting birds in western versus eastern parts of the Sound. ~~There are indications of reduced densities of harlequin ducks in the breeding season; a declining trend in the summer, postbreeding population; and very poor production of young in western Prince William Sound.~~

Recovery Objective

Harlequin ducks will have recovered when breeding and postbreeding season densities and production of young return to ~~estimated~~ prespill levels. ~~or when there are no differences in these parameters between oiled and unoiled areas.~~ A normal population age- and sex-structure and reproductive success appropriate to the habitat in western Prince William Sound will indicate that recovery is underway.

Intertidal Organisms

Injury and Recovery

Portions of 1,500 miles of coastline were oiled by the spill, and both the oil and intensive clean-up activities had significant impacts on the flora and fauna of the intertidal zone, the area of beach between low and high tides. With tidal action, oil penetrated deeply into cobble and boulder beaches, and, even with intensive clean up activities, persists in some beaches today. The most significant impacts occurred in middle and upper intertidal zones on sheltered rocky shores, which is where the greatest amounts of oil were stranded.

Small invertebrates like limpets, barnacles, and marine worms were less abundant at oiled versus unoiled index sites in Prince William Sound, Kodiak Island, and on the Kenai and Alaska peninsula coasts. The size, coverage, and reproductive potential of seaweed *Fucus gardneri* (known as rockweed or popweed) also was reduced following the spill. Although numbers of many species of invertebrate fauna have increased following the spill, recovery of *Fucus* in the upper intertidal zone is lagging. Full recovery of *Fucus* is crucial for recovery of the intertidal ecosystem, since many invertebrates depend on the cover provided by this seaweed. Many intertidal resources are important to subsistence users, as well as to sea and river otters, black oystercatchers, harlequin ducks, and pigeon guillemots.

~~The lower intertidal zone and, to some extent, the middle intertidal zone are recovering. However, injuries persist in the upper intertidal zone, especially on rocky sheltered shores. Recovery of this zone appears to depend, in part, on the return of adult *Fucus* in large numbers.~~

Recovery Objective

~~Each intertidal elevation (lower, middle, or upper) will have recovered when community composition, population abundance of component species, age-class distribution, and ecosystem functions and services in each injured intertidal habitat have returned to levels that would have prevailed in the absence of the oil spill.~~ Intertidal communities will have recovered when community composition on oiled shorelines is similar to that which would have prevailed in the absence of the spill. Indications of recovery are the return of keystone species, such as *Fucus*, and provision of adequate, uncontaminated food supplies for top predators in intertidal and nearshore habitats.

Killer Whales

Injury and Recovery

About ___ killer whales in _ "resident" pods regularly use Prince William Sound within their ranges. Other whales in "transient" pods enter the Sound less frequently. There has been particular concern in Prince William Sound about the resident AB pod, which numbered 36 animals prior to the spill. Fourteen whales disappeared from this pod in 1989 and 1990, during which time no young were recruited into the population. Although four calves were added to the AB pod during 1992-94, surveys in 1994 and 1995 indicate the loss of five more whales.

The link between these losses and the oil spill is only circumstantial, but the apparent mortality of killer whales in Prince William Sound following the spill far exceeds rates documented for pods in British Columbia and Puget Sound over the last 20 years. The AB pod may never regain its former size, but overall numbers of resident killer whales in Prince William Sound are at or exceed prespill levels. ~~Thirteen whales disappeared from one killer whale pod in Prince William Sound between 1988 and 1990. The injured pod is growing again.~~

Recovery Objective

Pending further evaluation of the status of the AB pod, no realistic recovery objective can be identified at this time. ~~Killer whales will have recovered when the injured pod grows to at least 36 individuals (1988 level).~~

~~Marbled~~ Murrelets, Marbled and Kittlitz's

Injury and Recovery

Prince William Sound and the northern Gulf of Alaska are key areas in the distributions of two poorly studied species of seabirds, marbled and Kittlitz's murrelets. The world population of Kittlitz's murrelet is believed to number only a few tens of thousands of birds, many of which are in the oil-spill area. The marbled murrelet is federally listed as a Threatened species in Washington, Oregon, and California; it is also listed as Threatened in British Columbia.

The marbled murrelet populations in Prince William Sound was ~~were~~ in decline before the spill. The causes of the prespill decline are unknown, but may be related to changing food supplies. The oil spill probably increased the prespill rate of decline for this species in the spill area, although the incremental injury is difficult to estimate. ~~The population of marbled murrelets may be stabilizing or even increasing since the spill.~~ Carcasses of nearly 1,100 murrelets were found after the spill, and it is estimated that as much as __ percent of the Prince William Sound marbled murrelet population was killed by the spill. Population estimates for murrelets are highly variable, and postspill boat surveys do not yet indicate any statistically significant increase in numbers of marbled murrelets in Prince William Sound. The recovery status of Kittlitz's murrelet is not known.

Recovery Objective

Marbled murrelets will have recovered when population trends are stable or increasing. No recovery objective can be identified for Kittlitz's murrelet at this time.

Mussels

Injury and Recovery

Mussels are an important prey species in the nearshore ecosystem throughout the oil-spill area, and beds of mussels provide physical stability in the intertidal zone. For these reasons, mussel beds were purposely left alone during *Exxon Valdez* clean-up operations. In 1991, high concentrations of relatively unweathered oil were found in the mussels and underlying byssal mats in certain dense mussel beds. ~~In 1991, relatively high concentrations of oil were found in mussels and in the dense underlying mat (byssal substrate) of certain oiled mussel beds. The beds were not cleaned nor was oil removed after the spill. The~~ The biological significance of oiled mussel beds is not known, but they ~~Oiled mussel beds~~ are potential pathways of ~~sources of fresh (unweathered)~~ oil contamination for local populations of harlequin ducks, black oystercatchers, river otters, and juvenile sea otters, all of which feed to some extent on mussels and show some signs of continuing injury. ~~The extent and magnitude of oiled mussel beds are unknown.~~ At least __ [70-?] mussel beds in Prince William Sound are known to still have oil residue; 12 beds were cleaned on an experimental basis in 1994. Subsistence users also continue to be concerned about contamination from oil mussel beds.

Recovery Objective

Mussels will have recovered when they do not contaminate their predators. ~~their populations and productivity are at prespill levels and they do not contain oil that contaminates higher trophic levels.~~

PACIFIC HERRING

Injury and Recovery

Pacific herring spawned in intertidal and subtidal habitats in Prince William Sound shortly after the oil spill. As much as 10 percent of the intertidal spawning habitat and 40 percent of the herring staging areas in the sound may have been contaminated by oil. Field studies conducted in 1989 and 1990 showed increased rates of egg mortality and larval deformities in oiled versus unoiled areas. Laboratory studies confirm that these effects can be caused by exposure to *Exxon Valdez* oil, but the significance of these injuries in the field at a population level is not known.

In 1992, herring biomass in Prince William Sound was at a record level. In 1993, however, there was an unprecedented crash of adult herring. A viral disease and fungus were the probable agents of mortality, and the connection between the oil spill and the disease outbreak is under investigation. Numbers of spawning herring in Prince William Sound have remained depressed through the 1995 season. Pacific herring are extremely important ecologically as well as commercially, and the closure of the herring fishery from 1993 through 1995 has had serious economic impact on people and communities in Prince William Sound.

~~Pacific herring studies have demonstrated egg mortality and larval deformities. Populations may have declined, but there is uncertainty as to the full extent and mechanism of injury. However, the stocks and dependent fisheries in Prince William Sound are not healthy, as indicated by the~~

~~low spawning biomass in 1993 and 1994 and the resultant elimination of the fisheries in those years.~~

Recovery Objective

Pacific herring will have recovered when indicators of population health, such as reproduction, growth, and recruitment, are within normal bounds and free of oil-related effects within Prince William Sound. ~~populations are healthy and productive and exist at prespill abundances.~~

PIGEON GUILLEMOT

Injury and Recovery

Although the pigeon guillemot is widely distributed, nowhere does it occur in large numbers or concentrations. Because guillemots feed in shallow, nearshore waters, both they and the fish they prey on are vulnerable to oil pollution. Like the marbled murrelet, the pigeon guillemot population in Prince William Sound was in decline before the spill. The causes of the prespill decline are unknown. It is estimated that 10-15 percent of the Gulf of Alaska population may have died in the spill, and declines along oiled shorelines in Prince William Sound were greater than along unoiled shorelines. Numbers of guillemots recorded on boat surveys are highly variable, and there is not yet any statistically significant evidence of a postspill population increase. The factors responsible for the guillemot's prespill decline may negate or mask recovery from the effects of the oil spill.

Recovery Objective

Pigeon guillemots will have recovered when the populations in Prince William Sound is ~~are~~ stable or increasing.

PINK SALMON

Injury and Recovery

About 75 percent of wild pink salmon in Prince William Sound spawn in the intertidal portions of streams and were highly vulnerable to the effects of the oil spill. Hatchery salmon and wild salmon from both intertidal and upstream spawning habitats swam through oiled waters and ingested oil particles and oiled prey as they foraged in the sound and emigrated to sea. As a result, three types of early life-stage injuries were identified: First, growth rates in juvenile salmon from oiled parts of Prince William Sound were reduced. Second, there was increased egg mortality in oiled versus unoiled streams. A possible third effect, genetic damage, is under investigation.

In the years preceding the spill, returns of wild pink salmon in Prince William Sound varied from a maximum of 21.0 million fish in 1984 to a minimum of 1.8 million in 1988. Since the spill, returns of wild pinks have varied from a high of about 14.4 million fish in 1990 to a low of about 2.2 million in 1992. There is particular concern about the Sound's southwest district,

where returns of both hatchery and wild stocks have been generally weak since the oil spill. Because of the tremendous natural variation in adult returns, however, it is difficult to attribute poor returns in a given year to injuries caused by oil. Injuries to salmon eggs and juveniles remain the best indicators of injury and recovery.

Evidence of reduced juvenile growth rates was limited to the 1989 season, but increased egg mortality persisted in oiled compared to unoiled streams through 1993. The 1994 and 1995 seasons were the first since 1989 in which there were no statistically significant differences in egg mortalities in oiled and unoiled streams. These data indicate that recovery from oil-spill effects is underway.

The Sound Ecosystem Assessment (SEA) Project is exploring physical and biological oceanographic factors that influence production of salmon and herring. These natural factors are likely to have the greatest influence over year-to-year returns in both wild and hatchery stocks of pink salmon.

~~Pink salmon studies have demonstrated egg mortality, fry deformities, and reduced growth in juveniles. Populations may have declined, but there is uncertainty as to the full extent and mechanism of injury. However, there is evidence of continued damage in some stocks from exposure to oil, and there were unexpectedly poor runs of both wild and hatchery stocks of pink salmon in Prince William Sound in 1992 and 1993. In 1994, runs were still depressed but exceeded forecasts.~~

Recovery Objective

Pink salmon will have recovered when population indicators, such as growth and survival, are within normal bounds and there are no statistically significant differences in egg mortalities in oiled and unoiled streams for two years each of odd- and even-year runs in Prince William Sound. ~~populations are healthy and productive and exist at prespill abundance. An indication of recovery is when egg mortalities in oiled areas match prespill levels or levels in unoiled areas.~~

River Otters

Injury and Recovery

River otters have a low density and an unknown population size in Prince William Sound, and, therefore, it is hard to assess oil-spill effects. Twelve otter carcasses were found following the spill. Studies conducted during 1989-1991 identified several differences between otters in oiled and unoiled areas in Prince William Sound, including biochemical evidence of exposure to hydrocarbons or other sources of stress, reduced diversity in prey species, reduced body size (length-weight), and increased territory size. However, sample sizes were small, and it is not clear that these differences are the result of the oil spill. The Nearshore Vertebrate Predator project, now underway, will shed new light on the status of the river otters. In 1995 the Alaska Board of Game used its emergency authority to restrict trapping of river otters in western Prince William Sound to ensure that the results of this study are not compromised by the removal of

animals from study areas on Montague and Knight islands. ~~River otters in Prince William Sound have suffered sublethal effects from the spill and may continue to be exposed to hydrocarbons.~~

Recovery Objective

The river otter will have recovered when biochemical indices of hydrocarbon exposure or other stresses and indices of habitat use are similar between oiled and unoiled areas of Prince William Sound, after taking into account any geographic effects. ~~Indications of recovery are when habitat use, food habitats and physiological indices have returned to prespill conditions.~~

ROCKFISH

Injury and Recovery

Very little is known about rockfish populations in the northern Gulf of Alaska. Dead adult rockfish were recovered following the oil spill, and chemical analysis of five specimens indicated that oil ingestion was the cause of death. Analysis of other rockfish showed exposure ~~were exposed~~ to hydrocarbons and ~~showed~~ sublethal effects. ~~Furthermore~~ In addition, closures to salmon fisheries apparently increased fishing pressures on rockfish, which may have affected ~~be affecting their~~ the rockfish population. However, the original extent ~~and mechanism~~ of injury and the current status of ~~to~~ this species are unknown.

Recovery Objective

Without further study, a recovery objective cannot be defined.

SEA OTTERS

Injury and Recovery

Surveys of sea otters in the 1970s and 1980s indicate that the population was expanding and about 10,000 animals lived in Prince William Sound prior to the spill. Based on the number of carcasses and other data, population models suggest that 3,500-5,500 otters died in the first few months following the spill. In 1990 and 1991, unusual numbers of prime-age adult otters were found dead and there was evidence of an increased death rate in recently weaned juveniles. By 1992-93, mortality rates for juveniles had decreased, but were still higher in oiled than in unoiled parts of Prince William Sound. Boat surveys conducted in March and July in 1993 and again in 1994 indicated a population of about 7,700 otters in the Sound, but there was no statistically significant evidence of a population increase following the spill (1990-1994). The Nearshore Vertebrate Predator project, which was started in 1995, should help clarify the recovery status of the sea otter in Prince William Sound. ~~Sea otters do not appear to be recovering, but are expected to eventually recover to their prespill population. Exactly what population increases would constitute recovery is very uncertain, as there are no population data from 1986 to 1989, and the population may have been increasing in Eastern Prince William Sound during that time. In addition, only large changes in the population can be reliably detected with current measuring techniques. However, there are recent indications that the patterns of~~

~~juvenile and mid-aged mortalities are returning to prespill conditions.~~

Recovery Objective

Sea otters will have recovered when the Prince William Sound population returns to its prespill abundance and distribution. An increasing population trend and normal reproduction and age structure in oiled parts of the sound will indicate that recovery is underway. ~~Sea otters will be considered recovered when population abundance and distribution are comparable to prespill abundance and distribution, and when all ages appear healthy.~~

SEDIMENTS

Injury and Recovery

With tidal action, oil penetrated deeply into cobble and boulder beaches that are ~~relatively~~ common on ~~the rocky islands of~~ shorelines throughout the spill area, especially in sheltered habitats. Cleaning removed much of the oil from the intertidal zone but subsurface oil persisted in many heavily oiled beaches and associated subtidal sediments. ~~in mussel beds, which were avoided during the cleanup.~~ Subsurface oil persists at least at ___ locations in Prince William Sound and as far away as the Alaska Peninsula. While much of this oil is probably not biologically active, it is of great concern to residents in oil-spill communities, and there are sites where sheening still occurs.

Following the oil spill, chemical analyses of oil in sediments were conducted at a small number of index sites in Prince William Sound. At these sites, oil in sediments reached its greatest concentrations at water depths of 20 meters, although elevated levels of hydrocarbon-degrading bacteria (associated with elevated hydrocarbons) were detected at depths of 40 and 100 meters in 1990 in Prince William Sound. ~~Chemical analyses show that *Exxon Valdez* oil apparently did not reach deeper than 20 to 40 meters, although elevated activities of hydrocarbon-degrading bacteria were seen somewhat deeper in some cases.~~ By 1993, however, there was little evidence of *Exxon Valdez* oil and related microbial activity at most index sites in Prince William Sound, except at those associated with sheltered beaches that were heavily oiled in 1989. These index sites--at Herring, Northwest, and Sleepy bays--were among the ___ at which subsurface oiling is still known to occur (see above).

Recovery Objective

Sediments will have recovered when ~~contamination causes no negative effects to the spill ecosystem~~ residues of subsurface oil at sheltered sites that were previously heavily oiled are declining or are biologically harmless.

SOCKEYE SALMON

Injury and Recovery

Commericial fishing was closed in portions of Cook Inlet and near Kodiak in 1989 to avoid any possibility of contaminated salmon being sent to market. As a result, there were higher-than-usual numbers (i.e., overescapement) of spawning fish entering the Kenai River, Red and Akalura lakes on Kodiak Island, and other lakes on Afognak Island and the Alaska Peninsula. Initially these high escapements may have produced an overabundance of juvenile sockeye that consumed huge quantities of zooplankton, thus destroying planktonic food webs in the nursery lakes. Although the exact mechanism is unclear, the result was lost sockeye production as shown by declines in the returns of adults per spawning sockeye.

The effects of the 1989 overescapement have persisted in the Kenai River system through 1995. Although the overall escapement goal for that system was met in 1995, there is concern that the initial overescapement will continue to affect post-spill year-classes and that sockeye returns are yet not sufficient to fulfill the commericial, recreational, and subsistence demands on sockeye salmon in the Kenai River system.

Production of zoolplankton in both Red and Akalura lakes on Kodiak Island has returned to normal. There continues to be some problem in the rate of production of sockeye fry in Red Lake, which may or may not be linked to the overescapement at the time of the oil spill. Continuing low adult escapements at Akalura Lake are more likely the result of a mixed stock fishery harvest in the Kodiak vicinity than a result of the earlier overescapement.

~~Sockeye salmon in Red Lake, Akalura Lake, and lakes in the Kenai River system declined in population because of adult overescapement in 1989. The Red Lake system may be recovering because the plankton has recovered and fry survival improved in 1993. However, Akalura Lake and the Kenai River lakes have not recovered: smolt production has continued to decline from these lakes. In the Kenai River lakes, for example, smolt production has declined from 30 million in 1989 to 6 million in 1990 and to less than 1 million in 1992 and 1993.~~

Recovery Objective

Sockeye salmon in the Kenai River system and Red and Akalura lakes will have recovered when adult returns-per-spawner are within normal bounds. ~~affected lakes will have recovered when populations are able to support overwinter survival rates and smolt outmigrations comparable to prespill levels.~~

Subtidal Organisms

Injury and Recovery

Oil that was transported down to subtidal habitats apparently caused changes in the size and species composition of plant and animal populations below lower tides. Different habitats, including eelgrass beds, kelp beds, and deep water, were compared at oiled and unoiled sites. The greatest effects were detected at oiled sites with sandy sea bottoms under eelgrass beds, at which there were reduced numbers and diversity of helmet crabs, amphipods, and other

crustaceans and mollusks. There also were sublethal effects on the eelgrass itself. Organisms living in sediment at depths of 3-20 meters were especially affected. Some opportunistic, such as *Musculus* mussels, a variety of polychaetes, and juvenile cod, apparently increased in numbers at oiled sites. Differences in oiled and unoiled sites were less evident by 1993.

~~Certain subtidal organisms, like eelgrass and some species of algae, appear to be recovering. Other subtidal organisms, like leather stars and helmet crabs, showed little signs of recovery through 1991.~~

Recovery Objective

Subtidal communities will have recovered when community composition in oiled areas, especially in association with eelgrass beds, is similar to that which would have prevailed in the absence of the spill. Indications of recovery are the return of keystone species, such as certain amphipods and other oil-sensitive crustaceans. ~~Subtidal communities will have recovered when the community composition, age-class distribution, population abundance of component species, and ecosystem functions and services in each injured subtidal habitat have returned to levels that would have prevailed in the absence of the oil spill.~~

Services

Commercial Fishing

Injury and Recovery

Commercial fishing is a service that was injured through injury to commercial fish species (see individual resources) and also through fishing closures. In 1989, closures affected fisheries in Prince William Sound, lower Cook Inlet, upper Cook Inlet, Kodiak, and Chignik. These fisheries opened again in 1990. Since then, there have been no spill-related district-wide closures, except for the Prince William Sound herring fishery, which was closed in 1993 and has remained closed since then due to the collapse of the herring population. These closures, including the on-going closure of the herring fishery in Prince William Sound, harmed the livelihoods of persons who fish for a living and the communities in which they live. To the extent that the oil spill continues to be a factor that reduces opportunities to catch fish, there is on-going injury to commercial fishing as a service.

On this basis, the Trustee Council continues to make major investments in projects to understand and restore commerically important fish species that were injured by the oil spill. These projects include: supplementation work, such as fertilizing Coghill Lake to enhance its sockeye salmon run and construction of a barrier bypass at Little Waterfall Creek; development of tools that have almost immediate benefit for fisheries management, such as otolith mass marking of pink salmon in Prince William Sound and in-season genetic stock identification for sockeye salmon in Cook Inlet; and research such as the SEA Project and genetic mapping which will enhance the ability to predict and manage fisheries over the long-term.

~~Continuing injuries to commercial fishing may cause hardships for fishermen and related businesses. Each year that commercial fishing remains below prespill levels compounds the injury to the fishermen and, in many instances, the communities in which they live or work.~~

~~The Trustee Council recognizes the impact to communities and people of the Prince William Sound region resulting from the sharp decline in pink salmon and herring fisheries in past years. In 1994, the Trustee Council committed over six million dollars to help address these issues through the development of an ecosystem based study for Prince William Sound. Some of the pink salmon and herring problems may be unrelated to the spill. However, the Council will continue to address these important problems.~~

Recovery Objective

Commercial fishing will have recovered when the commercially important fish species have recovered and opportunities to catch these species are not lost or reduced due to effects of the oil spill. population levels and distribution of injured or replacement fish used by the commercial fishing industry match conditions that would have existed had the spill not occurred. Because of the difficulty of separating spill-related effects from other changes in fish runs, the Trustee Council may use prespill conditions as a substitute measure for conditions that would have existed had the spill not occurred.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

The primary method for restoring commercial fishing is to restore the species that are fished commercially, such as pink salmon, Pacific herring, and sockeye salmon. These species are discussed elsewhere in this chapter. Three additional parts of the strategy for restoring commercial fishing are the following:

Promote recovery of commercial fishing as soon as possible. Many communities that rely on commercial fishing will be significantly harmed while waiting for commercial fish resources to recover through natural recovery alone. Therefore, an objective of restoration is to accelerate recovery of commercial fishing. This objective may be accomplished through increasing availability, reliability, or quality of commercial fish resources, depending on the nature of the injury. For resources that have sharply declined since the spill, such as pink salmon, and Pacific herring in Prince William Sound, this objective may take the form of increasing availability in the long run through improved fisheries management. Another example is providing replacement fish for harvest.

Protect commercial fish resources from further degradation. Further stress on commercial fish resources could impede recovery. Appropriate protection can take the form of habitat protection and acquisition if a resource faces loss of habitat. The Trustee Council can also contribute to the protection of commercial fish species by providing information needed to improve their management.

Monitor recovery. Monitoring the recovery of commercial fishing will track the progress of

recovery, detect major reversals, and identify problems with the resources and resource management that may affect the rate or degree of recovery. Inadequate information may require managers to unduly restrict use of the injured resources, compounding the injury to commercial fishing.

Passive Use

Injury and Recovery

Passive use of resources includes the appreciation of the aesthetic and intrinsic values of undisturbed areas, the value derived from simply knowing that a resource exists, and other nonuse values. Injuries to passive uses are tied to public perceptions of injured resources. [NOTE: THIS SAYS ALMOST NOTHING ABOUT INJURY. IS THERE ANYTHING TO SAY? PERHAPS A REFERENCE TO THE VALUATION SURVEYS DONE FOLLOWING THE SPILL?]

Recovery Objective

Passive uses will have recovered when people perceive that aesthetic and intrinsic values associated with the spill area are no longer diminished by the oil spill.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

Any restoration strategy that aids recovery of injured resources, or prevents further injuries, will assist recovery of passive use values. No strategies have been identified that benefit only passive uses, without also addressing injured resources. Since recovery of passive uses requires that people know when recovery has occurred, the availability to the public of the latest scientific information will continue to play an important role in the restoration of passive uses.

Recreation and Tourism

Injury and Recovery

The spill disrupted use of the spill area for recreation and tourism. Resources important for wildlife viewing and which are still injured by the spill include killer whale, sea otter, harbor seal, ~~bald eagle,~~ and various seabirds. Residual oil exists on some beaches with high value for recreation, and its presence may decrease the quality of recreational experiences and discourage recreational use of these beaches.

Closures of sport hunting and fishing also affected use of the spill area for recreation and tourism. Sport fishing resources include salmon, rockfish, Dolly Varden, and cutthroat trout. The Alaska Board of Fisheries restricted sport harvest of cutthroat trout in Prince William Sound in 1991 [?], and those restrictions remain in place. Harlequin ducks are hunted in the spill area. The Alaska Board of Game restricted sport harvest of harlequin ducks in Prince William Sound in 1991, and those restrictions remain in place.

Recreation was also affected by changes in human use in response to the spill. For example, displacement of use from oiled areas to unoiled areas increased management problems and facility use in unoiled areas. Some facilities, such as the Green Island cabin and the Fleming Spit camp area, were injured by clean-up workers.

In the years since the oil spill, there has been a general, marked increase in visitation to the spill area. There are still locations within the oil-spill area, however, avoided by recreational users because of the presence of residual oil.

Recovery Objective

Recreation and tourism will have recovered, in large part, when the fish and wildlife resources on which they depend have recovered, recreation use of oiled beaches is no longer impaired, and facilities and management capabilities can accommodate changes in human use.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

Preserve or improve the recreational and tourism values of the spill area. Habitat protection and acquisition are important means of preserving and enhancing the opportunities offered by the spill area. Facilities damaged during cleanup may be repaired if they are still needed. New facilities may restore or enhance opportunities for recreational use of natural resources. Improved or intensified public recreation management may be warranted in some circumstances. Projects that restore or enhance recreation and tourism would be considered only if they are consistent with the character and public uses of the area. However, all projects to preserve and improve recreation and tourism values must be related to an injured natural resource. See Policy 9 in Chapter 2.

Remove or reduce residual oil if treatment is cost effective and less harmful than leaving the oil in place. Removal of residual oil from beaches with high value for recreation and tourism may restore these services for some users. However, this benefit would have to be balanced against cost and the potential for further disruption to intertidal communities.

Monitor recovery. Monitor the recovery of resources used for recreation and tourism. Also monitor changes in recreation and tourism in the spill area.

SUBSISTENCE

Injury and Recovery

Before the oil spill, the Alaska Department of Fish and Game had documented 15 Native Alaskan communities (with about 2,200 people) in Prince William Sound, lower Cook Inlet, Kodiak, and the Alaska Peninsula that relied heavily on subsistence resources, such as fish, shellfish, seals, deer, and waterfowl. Per capita subsistence harvest ranged from nearly 200 pounds to more than 600 pounds per year. Subsistence harvests of fish and wildlife in most of these villages declined substantially following the oil spill. The reasons for these declines included reduced

availability of fish and wildlife to harvest, concern about possible health effects of eating contaminated or injured fish and wildlife, and disruption of lifestyles due to clean-up and other activities.

Subsistence foods were tested for evidence of hydrocarbon contamination during 1989-1994, and the results indicated that most resources contained no or very low concentrations of petroleum hydrocarbons. Eating foods with low levels of hydrocarbons posed no risk to human health, although subsistence users were advised not to eat shellfish from obviously contaminated areas. Samples of ducks from the Chenega Bay area in 1994 showed that exposure to crude oil had decreased significantly compared to the exposure levels documented since 1990.

Residual oil exists on some beaches near subsistence communities, and, in general, there continues to be concern or at least uncertainty about the safety of fish and wildlife resources. Uncertainty about the safety of resources reduces their use and value for subsistence.

Surveys by the Alaska Department of Fish and Game indicate that in some communities subsistence resources appear to be harvested at prespill levels based on total pounds-per-person. It is important to note, however, that the composition of many diets has shifted to include more fish and fewer seals. Diet composition continues to be a serious concern to subsistence users.

Subsistence users say that maintaining their subsistence culture depends on uninterrupted use of fish and wildlife resources. The more time users spend away from subsistence activities, the less likely that they will return to these practices. Continuing injury to natural resources used for subsistence may affect the way of life of entire communities. There is particular concern that the oil spill disrupted opportunities for young people to learn subsistence culture, and that this knowledge may be lost to them in the future.

Recovery Objective

Subsistence will have recovered when injured resources used for subsistence are healthy and productive and exist at prespill levels. In addition, there is recognition that people must be ~~and when people are~~ confident that the resources are safe to eat. ~~One indication that recovery has occurred is when~~ and that the cultural values provided by gathering, preparing, and sharing food need to be ~~are~~ reintegrated into community life.

[NOTE: THE FOLLOWING HAS NOT BEEN REVISED.]

Restoration Strategy

The primary way of restoring subsistence is to restore injured resources used for subsistence, such as clams, harbor seals, Pacific herring, pink salmon, sea otters, and sockeye salmon. These are discussed elsewhere in this chapter. Four additional parts of the strategy to restore subsistence are the following:

Promote recovery of subsistence as soon as possible. Many subsistence communities will be significantly harmed while waiting for resources used for subsistence to recover through natural recovery alone. Therefore, an objective of restoration is to accelerate recovery of subsistence use. This objective may be accomplished through increasing availability, reliability, or quality of resources used for subsistence, or increasing the confidence of subsistence users. Specifically, if subsistence harvest has not returned to prespill levels because users doubt the safety of particular resources, this objective may take the form of increasing the reliability of the resource through food safety testing. Other examples are the acquisition of alternative food sources and improved use of existing resources. However, all projects to promote subsistence must be related to an injured natural resource. See Policy 9 in Chapter 2.

Remove or reduce residual oil if treatment is cost effective and less harmful than leaving the oil in place. Removing residual oil from beaches with high value for subsistence may improve the safety of foods found on these beaches. This benefit would have to be balanced against cost and the potential for further disruption to intertidal communities.

Protect subsistence resources from further degradation. Further stress on subsistence resources could impede recovery. Appropriate protection can take the form of habitat protection and acquisition if important subsistence areas are threatened. Protective action could also include protective management practices if a resource or service faces further injury from human use or marine pollution.

Monitor recovery. Monitor the recovery of resources used for subsistence. Also monitor subsistence harvest.

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 29, 1995

Mr. Charles Nicolet
P.O. Box 2409
Seward, Alaska 99664

Dear Mr. Nicolet,

I enjoyed the chance to visit with you today on the phone in regard to your questions regarding the Grouse Lake parcel. As neighboring landowner and resident, I can understand that you want to learn more about what the Forest Service intends for this parcel if it is purchased.

As I mentioned, the *Exxon Valdez* Oil Spill Trustee Council has authorized the United States Forest Service to make an offer to purchase the 64 acre Grouse Lake parcel at an appraised fair market value of $211,000. The Forest Service is the lead agency for this effort. If the offer is accepted, the Grouse Lake parcel would be acquired and managed by the Forest Service. Attached you will find a brief description of the parcel.

For more specific information concerning the intentions of the Forest Service regarding management of the parcel, I encourage you to speak directly with Mr. Dave Gibbons who works for the Forest Service in Juneau (586-8784/ph). I will try to convey your concerns in this matter to Mr. Gibbons as well.

(With the combination of the Christmas Holidays and the federal government shutdown, I have not as yet been able to reach Mr. Gibbons, but will continue to attempt to do so.)

Sincerely,

Eric F. Myers

cc: Dave Gibbons

KEN 1014: Grouse Lake

Acreage:	64	**Rank:** PMSC	**Sponsor:** USFS	**Appraised Value:**	$211,000
Owner:	Jim McCracken (Agent)				
Location:	West shore of Grouse Lake, 7.5 miles north of Seward on the Seward Highway				

Parcel Description. The Grouse Lake parcel is located on the west shore of Grouse Lake and includes approximately ¼ mile of lakeshore 7.5 miles north of Seward on the Seward Highway. The parcel is the only level access area around Grouse Lake and Grouse Creek. The parcel is heavily forested and the lake and streams have clear water.

Restoration Benefits. Public ownership of this parcel will protect habitat for pink salmon, sockeye salmon, Dolly Varden, by preventing further development of the site. Acquisition will further benefit the restoration of sockeye salmon by ensuring continued access to Grouse Lake for ADFG's sockeye salmon stocking program. Public ownership of this parcel will also allow the USFS to replace and enhance recreational uses, such as sport fishing and wildlife viewing, that rely on natural resources that were injured in the spill.

Key habitats and other attributes of this parcel include the following:

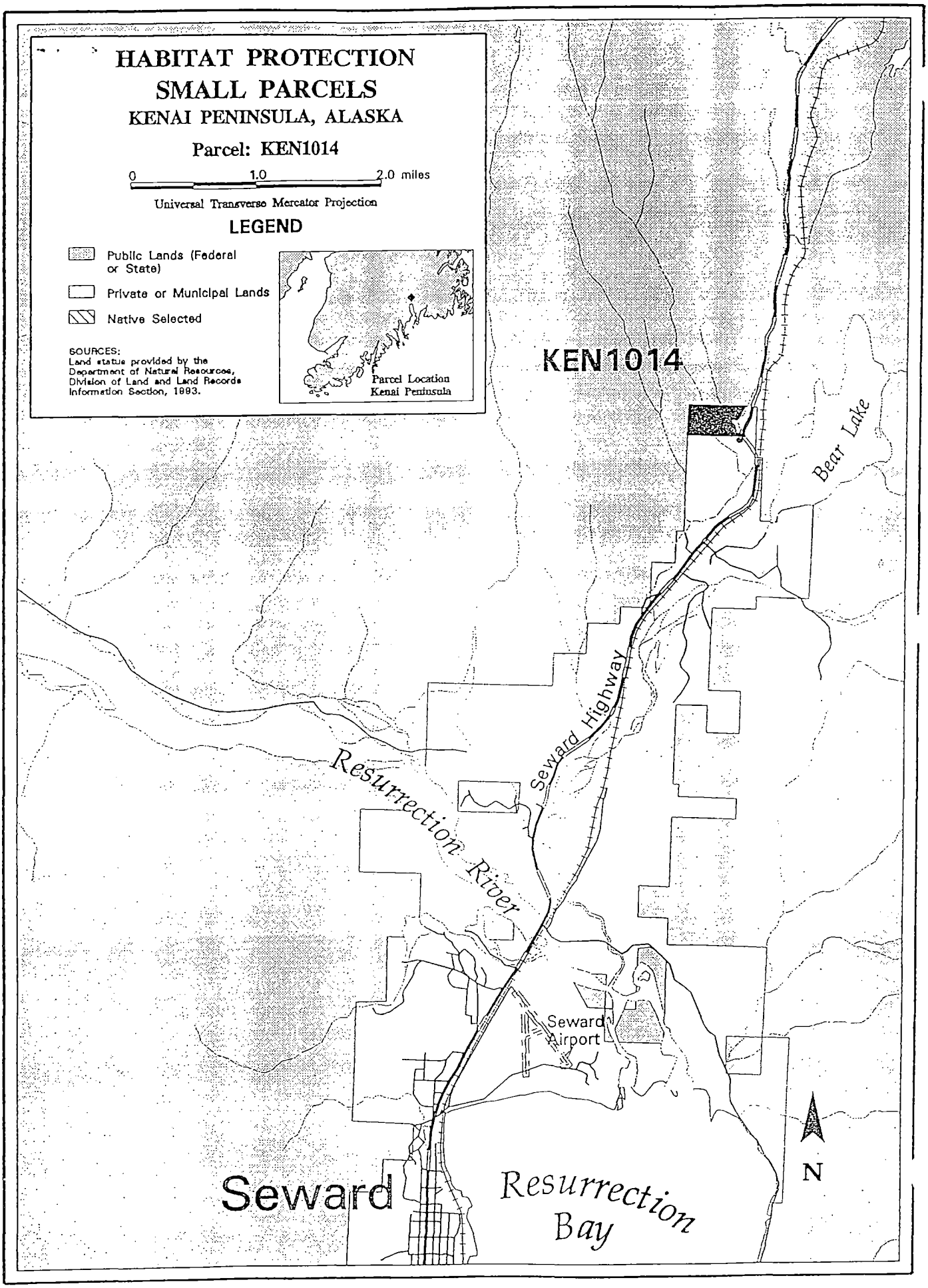
- *Pink salmon and Dolly Varden.* The parcel provides key habitat for pink salmon and Dolly Varden. Pink salmon spawn in the two streams on this parcel and Dolly Varden spawn in the streams and are reared in Grouse Lake.
- *Sockeye salmon.* Grouse Lake is the site of an active sockeye salmon stocking program by the Alaska Department of Fish and Game.
- *Recreation/tourism.* The lake has long been a favorite recreation area used by local residents and tourists for many years. Activities include camping, hiking and sport fishing. Sport fishing is the most popular activity including summer and winter fishing for Dolly Varden. This parcel provides an ideal location for a campground and a fishing area accessible to the handicapped.
- Bald eagles and river otters may also benefit from protection of this parcel. Bald eagles use the area, although there is no documented nesting. River otters are frequently seen in the lake and creek.

Potential Threats. Because of its proximity to the city of Seward and the Seward Highway, and its level topography, this parcel has development potential. Development possibilities include a residential subdivision or recreational cabins.

Appraised Value. The appraised value of this parcel is $211,000. This parcel is vacant and unimproved. The highest and best use of this parcel is for a homesite and future subdivision when the market warrants.

Proposed Management. This parcel is an inholding in Chugach National Forest. If the parcel is acquired, it would become part of the Chugach National Forest and be managed by the U.S. Forest Service for conservation.

Public Comment. The Restoration Office has received no written comments from the public regarding this parcel.


HABITAT PROTECTION
SMALL PARCELS
KENAI PENINSULA, ALASKA
Parcel: KEN1014
0
1.0
2.0 miles
Universal Transverse Mercator Projection
LEGEND
Public Lands (Federal or State)
Private or Municipal Lands
Native Selected
SOURCES:
Land status provided by the Department of Natural Resources, Division of Land and Land Records Information Section, 1993.
Parcel Location
Kenai Peninsula
KEN1014
Bear Lake
Seward Highway
Resurrection River
Seward Airport
Seward
Resurrection Bay
N

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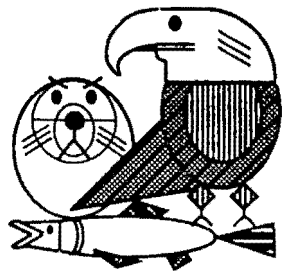

MEMORANDUM

To: Restoration Workshop Organizing Committee and Session Chairs (see Distribution)

From: Stan Senner

Date: December 27, 1995

Subj: Near Final Agenda for 1996 Restoration Workshop

Following is a near-final agenda for the Restoration Workshop. I am eager to circulate this to the principal investigators to address any remaining questions about who is giving oral presentations.

Session Chairs, especially, please look this over to see if it matches your understanding of what (and who) is to be in your sessions. Where two projects are shown together (on the same line), a combined presentation is intended.

I am going to try to get a draft of this circulated to PIs on Friday, so please try to let me know any comments on Thursday. I know that most of the federal EVOS staff are on furlough, but I want to get something around to resolve any lingering questions from the PIs.

Thank you.

attachment (1)

Distribution:
Committee - Catherine Berg, Andy Gunther, Bill Hauser, Bob Loeffler, Jeep Rice, Bob Spies, Joe Sullivan, Martha Vlasoff, and Bruce Wright

Session Chairs - Ted Cooney, Alex Wertheimer, Kathy Frost, David Duffy, Don Schell, and Mark Willette (plus Vlasoff and Rice, listed above)

[NOTE: THIS AGENDA IS STILL SUBJECT TO CHANGE AND, IN SOME CASES, CONFIRMATION OF PARTICIPANTS.]

[12/27/95 draft]

DRAFT

1996 RESTORATION WORKSHOP
January 16-18, 1996
Hotel Captain Cook, Anchorage

Day 1 - Tuesday (16th)

8:00 am — Registration

9:00 — *Introduction & Annual Report on EVOS Program*
Molly McCammon

9:30 — *Traditional Ecological Knowledge and Science: Successful Examples*
Larry Merculieff
Thomas Albert

10:30 — Break

11:00 — *Traditional Ecological Knowledge and Science: the EVOS Restoration Program*
Session Chair: Sandra Shubert (?)
Panel: Wynne, Gibbons, Huntington, EVOS Community Liaison (1)

12:00 pm — Buffet Lunch (in hotel)

1:15 — *Subsistence and Archaeology*
Session Chair: Martha Vlasoff
Projects 95052 & 138: Communities Interaction & Subsistence
Vlasoff & Simeone
Projects 95007A & B: Archaeological Sites
Yarborough & Reger

2:15 — *Trustee Perspectives*
Steve Pennoyer
Frank Rue

2:40 — *Integrating EVOS Science: Ecosystem Linkages*
Robert Spies

3:15 — Break

3:45 — *Environmental Characterization and Lower Trophic Levels*
Session Chair: Ted Cooney
Projects 95320H, G, J & M: SEA Oceanography & Plankton
Vaughn & Eslinger
Project 95086C: Herring Bay Monitoring
Stekoll (?)

Project 95106: Subtidal (Eelgrass) Monitoring
Jewett

6:00-8:00 Reception and Poster Session (in hotel)

DRAFT

Day 2 - Wednesday (17th)

8:00 am *Higher Trophic Levels - Forage Fish, Salmon, and Herring*
Session Chair: Alex Wertheimer
Projects 95320A & E: Overview on Salmon Growth & Mortality
Willette
Projects 95320T & E, 166: Overview on Herring Growth & Habitats
Norcross & Brown
Project 95163A: Distribution & Abundance of Forage Fish
Haldorson
Project 95258: Plankton & Sockeye Salmon Overescapement
Schmidt

9:45 Break

10:15 *Higher Trophic Levels - Mammals*
Session Chair: Kathy Frost
Projects: 95064: Habor Seal Monitoring & Habitats
Frost
Project 95012: Killer Whale Monitoring
Matkin

11:15 *Higher Trophic Levels - Birds*
Session Chair: David Duffy
Project: 95163K: Lower Cook Inlet/Barren Island Seabirds
Piatt
Project 95163G: Seabird Energetics
Roby

12:00 pm Buffet Lunch (in hotel)

1:00 *Birds* [continued]
Project 95031: Murrelet Productivity Index
Kuletz
Project 95427 & 025: Harlequin Duck Monitoring & Condition
Rosenberg & Esler

2:00 *Ecosystem Structure and Functions*
Session Chair: Don Schell
Project 95163I: Historical Review of Gulf of Alaska Trawl Data
Anderson
Project 95320I: Food Web Studies with Isotope Tracers
Kline & Schell (?)
Project 95064 & 117: Harbor Seal Trophic Interactions
Frost

DRAFT

3:00 Break

3:30 *Disease, Ecotoxicology and Oiling*
Session Chair: Stanley Rice
Projects 95191A& B: Oil and Early Life Stages of Salmon
Heintze
Project 95320S (162): Field Assessment of Herring Disease in PWS
Marty
Project 95001 & 064: Harbor Seal Health
Castellini
Project 95090: Oiled Mussel Beds
Babcock

Day 3 - Thursday (18th)

8:00 am *Fisheries Management, Stock Identification, and Resource Supplementation*
Session Chair: Mark Willette
Projects 95255 & 320D (196): Pink Salmon & Sockeye Genetics
Seebs
Projects 95320B (186) & 320C (188): Mass Marking Pink Salmon
Joyce (?)
Projects 95139A1 & C1, 043B: Fisheries Habitat Restoration
Schmid

9:30 *Information, Science Management, and Administration*
Molly McCammon

10:00 Break

10:30 *Updating the Injured Species List and Recovery Objectives*
(Concurrent Sessions with PIs and others providing suggestions)

12:00 pm Lunch (on your own)

1:30 *Alaska Sealife Center and EVOS Science*
Mike Castellini

2:00 *Reactions from Peer Reviewers*
Session Chair: Robert Spies
Panel: Peterson, Rose, Haney, Wheeler, and Mundy

3:00 *Closing Remarks*
Molly McCammon

3:15 Adjourn

****
*** MULTI TRANSACTION REPORT ***
****

TX/RX NO. 3399

INCOMPLETE TX/RX

TRANSACTION OK	[13] 19077896608	MORRIS-WRIGHT
	[18] 2672474	J.SULLIVAN
	[20] 7863350	C.BERG
	[35] 15103737834	B.SPIES
	[51] 15104513631	ANDY GUNTHER

ERROR

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*** MULTI TRANSACTION REPORT ***
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TX/RX NO. 3400

INCOMPLETE TX/RX 19074526410

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2766847

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*** ACTIVITY REPORT ***
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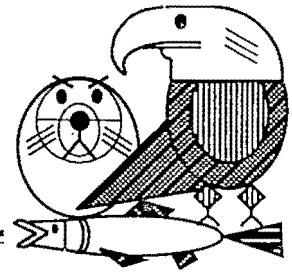
TRANSMISSION OK

TX/RX NO.	3400
CONNECTION TEL	19074526410
CONNECTION ID	
START TIME	12/28 08:40
USAGE TIME	02'13
PAGES	5
RESULT	OK

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



FAX COVER SHEET

To: SEE DISTRIBUTION Number:

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2/15/95

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Joe Sullivan/ADF&G

FROM: Molly McCammon
Executive Director

RE: Authorization -- Project 96139A2/Spawning Channel Construction Project
Port Dick Creek, Lower Cook Inlet

DATE: December 27, 1995

The purpose of this memorandum is to formally approve work to proceed on Project 96139A2/Spawning Channel Construction Project - Port Dick Creek, as described in the Detailed Project Description and including the hydrologic monitoring originally proposed as Project 96139D.

cc: Bob Spies
Traci Cramer

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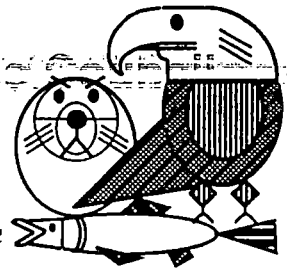

December 22, 1995

Gregg Gunnarson
Jack White Real Estate
3201 C Street, Suite 200
Anchorage, Alaska 99503-3994

Dear Mr. Gunnarson:

This letter is a follow-up to the previous letter dated December 1, 1995, to let you know that there remains a concern over the door leading into the meeting room on the first floor. Has a decision been made as to whether a single or double door will be installed? Again, we are concerned that large items located in the meeting room will not be able to be removed from the area and that a single door could adversely affect the flow of traffic in and out of the room.

We would like to receive a proposed schedule for painting and carpet installation for both the first and fourth floors as soon as possible. This will allow us to coordinate our schedules and minimize work disruptions.

It would be appreciated if you could get back to me as quickly as possible. In any case, I would like to know by January 2, 1996, so that I can work with the EVOS staff to manage this process effectively.

Sincerely,

Eric F. Myers
Director of Operations

cc: Dave Cechowski
State of Alaska/Department Of Administration

EM/ty

Exxon Valdez Oil Spill Trustee Council
Restoration Office
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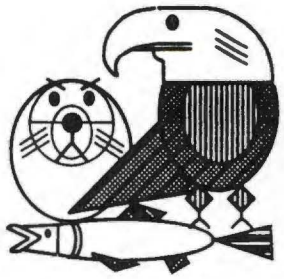
Phone: (907) 278-8012 Fax: (907) 276-7178



MEMORANDUM

TO: Restoration Work Force

FROM: Eric F. Myers

DATE: 12/22/95

SUBJ: Trustee Council Documents

For your records please find attached the final signed versions of the following documents:

1. Trustee Council Resolution dated December 11, 1995 concerning the Shuyak Island acquisition;

2. Trustee Council Resolution dated December 11, 1995 concerning additional small parcel offers authorized;

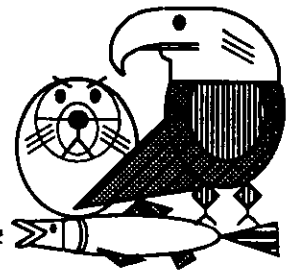
3. Trustee Council "Policy on Habitat Costs, Logistics, and Processes" dated December 11, 1995;

4. the most recent Court Request for the FY 96 Work Plan; and

5. a graphic timeline depicting the process for development of the FY 97 Work Plan (updated as of 12/18/95).

enclosures

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 20, 1995

Nancy Barnes, President
Eyak Corporation
P.O. Box 340
Cordova, Alaska 99574

Dear Ms. Barnes:

As you've probably heard, the Trustee Council recently took action on the Shuyak Island land deal with the Kodiak Island Borough, as well as a number of small parcel acquisitions throughout the spill area. I wanted to take this opportunity to let you know that an Eyak habitat protection package continues to be a very high priority for the Trustee Council.

We are all very committed to seeing this accomplished as soon as possible. It would be very helpful if we could meet with your board in the near future to discuss possible options. I will call you in the next week to try to make arrangements.

Sincerely,

Molly McCammon

Molly McCammon

cc: Eyak Corporation Board Members
Phil Janik, USFS
Alex Swiderski, ADOL

Exxon Valdez Oil Spill Trustee Council
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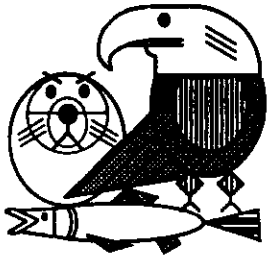


December 20, 1995

Jeffrey W. Short
NMFS - Auke Bay Laboratory
11305 Glacier Highway
Juneau, Alaska 99801

Dear Jeff:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96195, Pristane Monitoring in Mussels and Predators of Juvenile Pink Salmon & Herring. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. This is a technically innovative and excellent project. Collecting and measuring pristane in mussels may provide a simple measure of marine productivity, thus allowing predictions about future fisheries production and harvest levels.

Before a project may begin, the lead agency for the project (NOAA) must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act have been met. Once that occurs, you may receive authorization from the Executive Director to begin the project.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Byron Morris, NOAA

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Nancy Slagle
Director
Division of Budget Review
Office of Management and Budget

FROM: Molly McCammon
Executive Director

DATE: December 20, 1995

RE: *Exxon Valdez* Oil Spill Revised Program 11-6-9992

In accordance with Chapter 1, FSSLA 1992, the Departments of Fish and Game, Environmental Conservation, and Natural Resources request authority to receive and expend $2,231,100 from *Exxon Valdez* oil spill settlement trust funds.

This represents the second request for authority to receive and expend settlement trust funds for the Federal Fiscal Year 1996 Work Plan. The first request, RPL 11-6-9990 was approved by the committee at the September 28, 1995 meeting. This revised program requests additional authority and incorporates all Trustee Council action to date.

The 1996 Work Plan was developed based on extensive scientific, budget and policy review, taking into consideration comments received from the public and the Trustee Council's 17-member Public Advisory Group. The following discussion is an overview of the process used for development of the 1996 Work Plan. In addition, attached is a flow-chart which depicts the process.

In November 1994, the Trustee Council adopted the *Exxon Valdez* Oil Spill Restoration Plan. The plan provides for a comprehensive, balanced approach to achieve the recovery objectives for the biological resources and human services injured by the oil spill. To be eligible for funding, proposals must be consistent with the policies in the Restoration Plan.

At the 1995 Restoration Workshop held January 17-20, 1995 in Anchorage, over 120 participants, including individuals currently conducting restoration projects, scientists

familiar with the spill, and members of the public reviewed previous years' work and analyzed restoration needs for the future. The Trustee Council staff used discussions at the workshop to produce the March 1995 Invitation to Submit Restoration Projects for Federal Fiscal Year 1996 and Draft Restoration Program: FY96 and Beyond (Invitation). The Invitation called for proposals to be submitted by May 1, 1995.

Public involvement and comment was also solicited during this period. A series of public meetings were held throughout the spill area during the month of April. The focus of the meetings was to discuss concerns of the public relevant to the continuing effects of the oil spill, communicate findings of previous years' work, discuss the Draft FY96 Restoration Program, and answer questions about the 1996 Invitation.

After proposals were received, they were reviewed by the Chief Scientist and peer reviewers, who are under contract to provide the Trustee Council an independent scientific and technical review of project proposals. Concurrently with the scientific review, all proposals were reviewed by the staff of the Trustee Council. This included individuals from the Restoration Office, representatives of each Trustee agency, and legal counsel from both the federal and state governments.

Based on the reviews, the preliminary recommendation of the Executive Director was published in the Draft Fiscal Year 1996 Work Plan in late June, with public comments due August 4, 1995. In addition, a public hearing on the Draft Work Plan was held on July 20, 1995 in Anchorage. Teleconference access was available to spill area communities and other interested communities.

The Public Advisory Group met in early August to review the Executive Director's preliminary recommendations and provide additional public comment. The Executive Director developed the final recommendations for consideration by the Trustee Council, taking into consideration comments received from the public and the Public Advisory Group.

Based on the Executive Director's recommendations and public comments, the Trustee Council took action on the first part of the FY 1996 Work Plan on August 25, 1995. RPL 11-6-9990 was then submitted to the Legislative Budget and Audit Committee for approval on September 28, 1995.

As noted at the September Legislative and Budget Audit Committee meeting, the Trustee Council did not act on the entire Work Plan in August. For some projects, the Council deferred action pending further review. For the most part, this review involved analysis of the results from the 1995 field session. Based on a series of these reviews, the Trustee Council met December 11, 1995 and took action on the balance of the 1996 Work Plan.

The attached table reflects the individual projects proposed for implementation by the

state agencies. Committee action is being sought on twenty projects. Of that total, additional authorization is being proposed on fourteen projects previously approved, one project has been reduced, one project has been eliminated, and four new projects are being proposed. An abstract for each project has been attached to this request. The abstract summarizes the project, the Chief Scientist's recommendation on the project and the Trustee Council action. Detailed information exists for each project. If you would like additional information on any of the projects or any other aspect of the restoration program, please let me know.

Since the Trustee Council operates on the Federal Fiscal Year, authority to receive and expend is being requested through state fiscal year 1997 for these projects. Authorization to receive and expend is being requested in the amount of $2,231,100 allocated to agencies as follows:

Environmental Conservation	$50,200
Fish and Game	$1,846,600
Natural Resources	$334,300

Thank you for consideration of this request. If you have any questions, give me a call at 278-8012.

attachments

cc: Joe Sullivan, ADF&G
Ernie Piper, ADEC
Carol Fries, ADNR

Exxon Valdez Oil Spill Trustee Council

Development of the FY 96 Restoration Work Plan

January 1995
Annual Restoration Workshop

Review of restoration program to date by Independent scientists, researchers, resource managers, community representatives, PAG members, Chief Scientist, and Restoration Office staff.

Key Issues discussed:

- What is the status of injured resources?
- Are restoration objectives still appropriate?
- What did we accomplish in 1994?
- What should be done in the future ?

Basis for *FY96 Invitation and Draft Restoration Program: FY 96 & Beyond*

March 1995
Invitation for FY 96 Project Proposals

Invitation for FY 96 & Draft Restoration Program: FY 96 and Beyond

- Review and summary of key findings and accomplishments
- Continued focus on key restoration issues
- Projection of anticipated restoration work plan FY 1996 – 1998
- Increased use of competitive mechanisms (Broad Agency Announcement)
- Project proposals submitted by May 1, 1995

May – August 1995
FY 96 Project Evaluation and Council Action

- 128 proposals submitted totalling approximately $38.8 million
- Chief Scientist/peer review process
- PAG review
- *Draft FY 96 Work Plan* published in late June
- Public comment solicited
- Legal and budget review
- Executive Director recommendation developed
- Trustee Council authorizes majority of FY 1996 projects
- RPL 11-6-9990 submitted and approved by Legislative Budget and Audit

August — Dec 1995
Review Sessions on Deferred Projects and Council Action

- Deferred projects subject to further technical review
- Technical peer reviews:
  - octopus
  - clams
  - harlequin duck
  - shoreline oiling
  - Pacific herring
  - sockeye salmon
  - seabird/forage fish
  - pink salmon/genetics
- PAG review and Executive Director recommendation developed
- Trustee Council authorizes remainder of 1996 projects
- RPL 11-6-9992 submitted to Legislative Budget and Audit

DRAFT 12/20/95

EXXON VALDEZ TRUSTEE COUNCIL
1996 Federal Fiscal Year Project Budget
October 1, 1995 - September 30, 1996

Agency	Project Number	Project Title	RPL 11-6-9990	RPL 11-6-9992	STATE FUNDS TOTAL
ADEC	96027	Kodiak Archipelago Shoreline Assessment	$10.0	$15.2	$25.2
	96100	Administration, Public Information and Scientific Management	$204.3		$204.3
	96115	Sound Waste Management Plan	$28.3		$28.3
	96507	EVOS Symposium Publication		$35.0	$35.0
		ADEC Total	**$242.6**	**$50.2**	**$292.8**
ADF&G	96001	Recovery of Harbor Seals: Condition and Health Status	$214.1		$214.1
	96025	Mechanism of Impact and Potential Recovery of Nearshore Vertebrate Predators	$542.4		$542.4
	96052	Community Involvement and Use of Traditional Knowledge	$261.0	$10.0	$271.0
	96064	Monitoring, Habitat Use and Trophic Interactions of Harbor Seals in PWS	$347.3		$347.3
	96086	Herring Bay Monitoring and Restoration Studies	$173.0		$173.0
	96100	Administration, Public Information and Scientific Management	$1,956.4		$1,956.4
	96106	Subtidal Monitoring: Eelgrass Communities	$250.0	$(22.8)	$227.2
	96126	Habitat Protection Acquisition Support	$20.0		$20.0
	96127	Tatitlek Coho Salmon Release	$26.6		$26.6
	96131	Chugach Native Region Clam Restoration		$274.9	$274.9
	96139A1	Salmon Instream Habitat and Stock Restoration - Little Waterfall Barrier Bypass	$55.0		$55.0
	96139A2	Spawning Channel Construction Project - Port Dick, Lower Cook Inlet	$230.5		$230.5
	96162	Investigations of Disease Factors Affecting Declines of Pacific Herring Populations in PWS	$204.1	$430.9	$635.0
	96163C	Fish Diet Overlap Using Fish Stomach Content Analysis	$21.5	$34.2	$55.7
	96163L	Historical Review of Ecosystem Structure in the PWS/GOA Complex and Abundance and Distribution of Forage Fish in the Barren Islands	$4.8	$27.5	$32.3

EXXON VALDEZ TRUSTEE COUNCIL
1996 Federal Fiscal Year Project Budget
October 1, 1995 - September 30, 1996

Agency	Project Number	Project Title	RPL 11-6-9990	RPL 11-6-9992	STATE FUNDS TOTAL
	96164	Pacific Herring Program Leadership	$49.2	$(49.2)	$0.0
	96165	Genetic Discrimination of Prince William Sound Herring Populations	$103.9		$103.9
	96166	Herring Natal Habitats	$229.9	$214.2	$444.1
	96170	Isotope Ratio Studies of Marine Mammals	$150.4		$150.4
	96180	Kenai Habitat Restoration and Recreation Enhancement Project	$281.0		$281.0
	96186	Coded Wire Tag Recoveries From Pink Salmon in Prince William Sound	$254.9		$254.9
	96188	Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon in PWS	$93.2		$93.2
	96190	Construction of Linkage Map for Pink Salmon Genome		$167.7	$167.7
	96191A	Oil-Related Embryo Mortalities in PWS Pink Salmon Populations	$389.5	$85.1	$474.6
	96196	Genetic Structure of Prince William Sound Pink Salmon	$71.3	$107.2	$178.5
	96210	Prince William Sound Youth Area Watch	$115.0		$115.0
	96214	Documentary on Subsistence Harbor Seal Hunting in PWS	$77.4		$77.4
	96225	Port Graham Pink Salmon Subsistence Project	$95.3		$95.3
	96244	Community Based Harbor Seal Management and Biological Sampling	$128.5		$128.5
	96255	Kenai River Sockeye Salmon Restoration	$239.8	$67.2	$307.0
	96256	Columbia and Solf Lakes Sockeye Salmon Stocking		$17.4	$17.4
	96258A	Sockeye Salmon Overescapement Project	$460.2	$136.4	$596.6
	96259	Restoration of Coghill Lake Sockeye Salmon	$71.0	$83.9	$154.9
	96272	Chenega Chinook Release Program	$52.3		$52.3
	96320E	Salmon and Herring Predation	$637.7		$637.7
	96320G	Phytoplankton and Nutrients	$162.2		$162.2
	96320H	Zooplankton in the PWS Ecosystem	$323.6		$323.6
	96320I	Isotope Tracers - Food Webs of Fish	$83.3		$83.3
	96320J	Information Systems and Model Development	$180.5		$180.5
	96320K	PWSAC: Experimental Fry Release	$61.4		$61.4

EXXON VALDEZ TRUSTEE COUNCIL
1996 Federal Fiscal Year Project Budget
October 1, 1995 - September 30, 1996

Agency	Project Number	Project Title	RPL 11-6-9990	RPL 11-6-9992	STATE FUNDS TOTAL
	96320M	Physical Oceanography in PWS	$191.7		$191.7
	96320N	Nekton/Plankton Acoustics	$209.9		$209.9
	96320R	SEA Trophodynamic Modeling and Validation Through Remote Sensing	$202.7		$202.7
	96320T	Juvenile Herring Growth and Habitat Partitioning	$1,141.6		$1,141.6
	96320U	Energetics of Herring and Pollock	$189.5		$189.5
	96320Y	Variation in Local Predation Rates on Hatchery-Released Fry	$40.0		$40.0
	96320Z1	Synthesis and Integration	$68.8		$68.8
	96427	Harlequin Duck Recovery Monitoring	$51.0	$210.1	$261.1
	96600	Program Management	$53.5	$51.9	$105.4
		ADF&G Total	**$10,766.9**	**$1,846.6**	**$12,613.5**
ADNR	96007A	Archaeological Index Site Monitoring	$96.4		$96.4
	96100	Administration, Public Information and Scientific Management	$847.5		$847.5
	96126	Habitat Protection Acquisition Support	$394.6	$334.3	$728.9
	96149	Archaeological Site Stewardship	$54.1		$54.1
	96154	Comprehensive Community Planning for Restoration of Archaeological Resources in PWS and Lower Cook Inlet	$9.6		$9.6
	96180	Kenai Habitat Restoration and Recreation Enhancement Project	$241.9		$241.9
		ADNR Total	**$1,644.1**	**$334.3**	**$1,978.4**
		TOTAL	**$12,653.6**	**$2,231.1**	**$14,884.7**

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96027			
Project Title:	Kodiak Archipelago Shoreline Assessment: Monitoring Surface and Subsurface Oil			
Proposer:	ADEC			
RPL Request:	ADEC	$15.2	Cluster:	Nearshore Ecosystem Projects
Total FY 96:	$39.8		Cooperating Federal Agencies:	NOAA

Project Summary:

Continued funding for ongoing project. This project completes work begun in FY 95 to determine the areal extent, toxicity and origin of oil on selected Kodiak Archipelago shorelines. Most of these shorelines were last surveyed in 1990. The information about the remaining oil is necessary to determine whether recovery is proceeding at an acceptable rate, and to help local people assess whether the presence of remaining oil is still affecting shoreline activities. It also provides funding to develop information about future shoreline treatment in Prince William Sound.

Chief Scientist's Recommendation:

Close-out funding will allow community meetings to be held and final report to be written.

Trustee Council Action:

Fund. Project is closeout of FY 95 shoreline assessment work in Kodiak. Project also will develop and assess information about future monitoring needs and alternative shoreline treatments.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96052		
Project Title:	Community Involvement & Use of Traditional Knowledge		
Proposer:	Chugach RRC		
RPL Request:	ADFG $10.0	Cluster:	Subsistence Projects
Total FY 96:	$271.0	Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. This project, submitted by the Chugach Regional Resources Commission (CRRC), will continue a program begun in FY 95. This project will encourage and facilitate communication among the Trustee Council, researchers working on oil spill restoration projects, regional organizations and residents of communities impacted by the oil spill. The project includes a pilot effort to integrate western science and Traditional Ecological Knowledge to further the restoration program.

Chief Scientist's Recommendation:

Addresses needed restoration work by furthering interactions between EVOS scientists and community members.

Trustee Council Action:

Fund. This project continues a program to facilitate communication and interaction among the Trustee Council, scientists, and residents of communities impacted by the oil spill.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96106		
Project Title:	Subtidal Monitoring: Eelgrass Communities		
Proposer:	Jewett/UAF		
RPL Request:	ADFG $(22.8)	Cluster:	Nearshore Ecosystem Projects
Total FY 96:	$253.1	Cooperating Federal Agencies:	NOAA

Project Summary: This project would provide funds to write the final report for Project 95106. The budget reflects projected costs of sample analysis, data analysis, and report preparation. The final report will incorporate and compare all data collected since 1991. This reduction in authorization reflects a transfer of funds from ADFG to NOAA based on new cost estimates of sample analysis.

Chief Scientist's Recommendation: This is a close-out project for work previously funded by the Trustees. The investigator is doing a very good job on subtidal studies.

Trustee Council Action: Fund. This project closes out work funded in previous years.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96126		
Project Title:	Habitat Protection and Acquisition Support		
Proposer:	ADFG, ADNR		
RPL Request:	ADNR $334.3	Cluster:	Habitat Protection Support
Total FY 96:	$2,160.9	Cooperating Federal Agencies:	USFS, DOI

Project Summary: Continued funding for ongoing project. This project supports activities necessary for the Trustee Council's habitat protection program, including negotiations with willing private landowners, parcel appraisals, hazardous materials surveys, title searches, and site visits as needed. Authority to receive and expend at this time is limited to acquisition support and management costs. Separate requests will be submitted for review once agreements involving the state are completed.

Chief Scientist's Recommendation: The Chief Scientist's recommendation in support of habitat protection was documented as part of the *Report of the Executive Director Concerning Habitat Acquisition* (November 28, 1994).

Trustee Council Action: Fund.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96131		
Project Title:	Chugach Native Region Clam Restoration		
Proposer:	Chugach RRC		
RPL Request:	ADFG $274.9	Cluster:	Subsistence Projects
Total FY 96:	$274.9	Cooperating Federal Agencies:	None

Project Summary:

Resident clam populations near the Native villages of Port Graham, Nanwalek, and Tatitlek will be re-established to restore diminished subsistence opportunities. The Qutekcak hatchery in Seward will annually provide about 800,000 juvenile littleneck clams, cockles and, if possible, butter clams for seeding. Historical information, local and agency expertise, and research will be used to identify areas to seed and methods used. Total seeded area will not exceed 5 hectares. In addition, beaches will be surveyed in Chenega and Ouzinkie for possible future seeding. Also, Eyak razor clams will be identified and work will be initiated to protect the existing clam populations from natural predators.

Chief Scientist's Recommendation:

This project was successful in spawning little-neck clams and raising their spat, and it has the potential of making an important contribution to restoration of subsistence use of clams. However, there is need for continued development of hatchery techniques, which will require consultation with experts who have appropriate experience. I recommend continued support of this project, emphasizing development of hatchery techniques that eventually may be applied on a larger scale.

Trustee Council Action:

Fund continuing pilot effort in Port Graham, Nanwalek, and Tatitlek. Fund initial beach surveys in Chenega and Ouzinkie, and analysis of clam predator problem in Cordova (Native Village of Eyak). Funding is contingent on approval of Detailed Project Description, which must address hatchery issues raised by peer reviewers. Project is intended to establish subsistence clam populations as replacement for subsistence resources injured by the oil spill.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96162		
Project Title:	Investigations of Disease Factors Affecting Declines of Pacific Herring Populations in Prince William Sound, AK		
Proposer:	UW/UCD/SFU		
RPL Request:	ADFG $430.9	Cluster:	Herring Projects
Total FY 96:	$635.0	Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. Field and laboratory studies will focus on Viral Hemorrhagic Septicemia (VHS) and *Ichthyophonus hoferi*, a pathogenic fungus, to determine their role in the disease and mortality observed in PWS herring since 1993. Herring in PWS will be monitored three times per year for signs of disease and immune status. Specific pathogen-free herring will be used to determine the degree of mortality, blood chemical changes and pathogenicity produced by these organisms alone and in combination with exposure to stressors such as petroleum hydrocarbons, temperature and crowding. (This project was formerly numbered 95320S.)

Chief Scientist's Recommendation:

Substantial progress has been made in understanding the role of VHS and *Icthyphonus* in the recent decline of Pacific herring stocks in Prince William Sound. The hypothesis that oil-induced stress is linked to the disease outbreak and population decline remains viable. The project is on track for achieving its objectives, and I recommend continued funding.

Trustee Council Action:

Fund. Project is designed to investigate potential link between oil exposure and disease, and between disease and the herring population decline in PWS. Understanding the causes of the decline and the lack of recovery is important for restoration and resumption of the herring fishery.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96163C		
Project Title:	Fish Diet Overlap Using Fish Stomach Content Analysis		
Proposer:	NOAA		
RPL Request:	ADFG $34.2	Cluster:	Seabird/Forage Fish Ecosystem Project
Total FY 96:	$76.9	Cooperating Federal Agencies:	NOAA

Project Summary:

Continued funding for ongoing ecosystem Project 96163 (Seabird-Forage Fish/APEX). This study will use seabirds as "probes" of the trophic environment of PWS and compare their reproductive and foraging biologies with similar measurements from the Barren Islands, an area with more suitable or abundant food. Measurements will be compared with hydroacoustic and net samples of fish to calibrate seabird performance with fish distribution and abundance. The project will use fish samples to compare diet, energetics and reproductive parameters of different forage-fish species to determine whether competitive and predatory interactions or different responses to the environment may be favoring the abundance of one fish species over another.

Chief Scientist's Recommendation:

This project was undertaken as a pilot in FY95; remarkable progress was achieved in demonstrating the link between seabird productivity and forage fish populations in the spill area. The intercolony comparisons have provided qualitative evidence of food limitation of seabird colonies, which is essential to successful testing of the APEX hypotheses. However there are substantial challenges ahead in documenting these relationships on a quantitative basis. In the future, the emphasis of the work should shift from deep water to nearshore environments because most of the important interactions between seabirds and forage fish take place there. Preliminary analysis of historical trawl-catch data in the Gulf of Alaska has been extremely helpful showing how long-term and potentially large-scale changes in the composition of crustacean and fish populations might affect marine bird and mammal populations. This historical work, coupled with the current field investigations, may lead to significant improvement in the ability to understand, predict and manage the spill-area ecosystem on a sustained basis. Recommend funding this work on a full-scale basis in FY96.

Trustee Council Action:

Fund. Pilot effort in FY95 showed a link between forage fish and seabird productivity. The scientific reviewers are enthusiastic about the prospect that this work will yield results that are of benefit to the marine ecosystem in PWS and the northern Gulf of Alaska.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96163L		
Project Title:	Historical Review of Ecosystem Structure in the PWS/GOA Complex		
Proposer:	DOI		
RPL Request:	ADFG $27.5	Cluster:	Seabird/Forage Fish Ecosystem Project
Total FY 96:	$97.4	Cooperating Federal Agencies:	DOI, NOAA

Project Summary:

Continued funding for ongoing ecosystem Project 96163 (Seabird-Forage Fish/APEX). This study will use seabirds as "probes" of the trophic environment of PWS and compare their reproductive and foraging biologies with similar measurements from the Barren Islands, an area with more suitable or abundant food. Measurements will be compared with hydroacoustic and net samples of fish to calibrate seabird performance with fish distribution and abundance. The project will use fish samples to compare diet, energetics and reproductive parameters of different forage-fish species to determine whether competitive and predatory interactions or different responses to the environment may be favoring the abundance of one fish species over another.

Chief Scientist's Recommendation:

This project was undertaken as a pilot in FY95; remarkable progress was achieved in demonstrating the link between seabird productivity and forage fish populations in the spill area. The intercolony comparisons have provided qualitative evidence of food limitation of seabird colonies, which is essential to successful testing of the APEX hypotheses. However there are substantial challenges ahead in documenting these relationships on a quantitative basis. In the future, the emphasis of the work should shift from deep water to nearshore environments because most of the important interactions between seabirds and forage fish take place there. Preliminary analysis of historical trawl-catch data in the Gulf of Alaska has been extremely helpful showing how long-term and potentially large-scale changes in the composition of crustacean and fish populations might affect marine bird and mammal populations. This historical work, coupled with the current field investigations, may lead to significant improvement in the ability to understand, predict and manage the spill-area ecosystem on a sustained basis. Recommend funding this work on a full-scale basis in FY96.

Trustee Council Action:

Fund. Pilot effort in FY95 showed a link between forage fish and seabird productivity. The scientific reviewers are enthusiastic about the prospect that this work will yield results that are of benefit to the marine ecosystem in PWS and the northern Gulf of Alaska.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96164		
Project Title:	Pacific Herring Program Leadership		
Proposer:	ADFG		
RPL Request:	ADFG $(49.2)	Cluster:	Herring Projects
Total FY 96:	$0.0	Cooperating Federal Agencies:	None

Project Summary:

This project was intended to facilitate coordination, integration, and review of different aspects of Pacific herring in the PWS ecosystem. Upon further review, it was determined that the herring studies were progressing well and that these funds could be more effectively used in other aspects of the restoration program.

Chief Scientist's Recommendation:

Although I had previously recommended that ADFG needed additional leadership for its herring studies, it is evident from the recent review that ADFG's herring work is on track and that there is little prospect that the agency would be able to support increased personnel costs once Trustee support has concluded. Thus, I recommend that the funds allocated in August be withdrawn.

Trustee Council Action:

Terminate funding. With little prospect that ADFG will take over the future role expected of this project and with herring research on track under the guidance of the peer review policy, interim Trustee Council funding is not necessary.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96166		
Project Title:	Herring Natal Habitats		
Proposer:	ADFG		
RPL Request:	ADFG $214.2	Cluster:	Herring Projects
Total FY 96:	$444.1	Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. Past studies have documented damage from oil exposure in adult herring, hatching success of embryos, and levels of physical and genetic abnormalities in larvae. The PWS herring spawning population has drastically declined since 1993, and pathology studies implicated Viral Hemorrhagic Septicemia (VHS) and *Ichthyophonus* as potential sources of mortality as well as indicators of stress. The project will continue to provide estimates of spawning herring abundance and investigate the lethality of suspected pathogens and the role of environmental contaminants in disease transmission through laboratory and field studies.

Chief Scientist's Recommendation:

This work is vital to on-going management of Pacific herring in Prince William Sound. I recommend one more year of full support from the Trustees, provided that there is an explicit plan developed for transfer of this program back to ADFG as part of normal agency management.

Trustee Council Action:

Fund for FY 96 contingent upon expectation that project begins a transition to non-Trustee funding source in FY 97. Project's major objective is to improve estimate of spawning biomass of herring. This information is needed to establish harvest levels and guidelines that allow restoration to occur and to sustain a healthy fishery.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96190		
Project Title:	Construction of a Linkage Map for the Pink Salmon Genome		
Proposer:	Allendorf/UM		
RPL Request:	ADFG $167.7	Cluster:	Pink Salmon Projects
Total FY 96:	$167.7	Cooperating Federal Agencies:	None

Project Summary:

Proposal would construct a detailed genetic linkage map for pink salmon by analyzing the genetic transmission of several hundred DNA polymorphisms. The ability to genetically map the location of oil-induced lesions will allow the thorough identification, description, and understanding of oil induced genetic damage. This research will also aid other pink salmon studies including estimation of straying rates, description of stock structure, and testing whether marine survival has a genetic basis.

Chief Scientist's Recommendation:

This project will produce a linkage map for a large number of genes in pink salmon. This project would potentially provide significant benefits for pink salmon, because it would increase knowledge of the genetic implications of management and supplementation decisions for wild and hatchery stocks. For example, a genetic linkage map would facilitate development of disease-resistant strains of fish and provide new markers for genetic stock identification. This project will require several years of support, and I encourage the proposers to seek additional sources of funds in the future. In addition, the proposer should coordinate with current efforts at the University of Alaska.

Trustee Council Action:

Fund. This project provides fundamental information which will likely aid restoration of wild stocks of pink salmon and which are likely to benefit all pink salmon management in the future. It is a long-term project with national importance. Recommendation is to provide two years of funding at the requested level, but proposers should seek additional funding sources in future years.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96191A			
Project Title:	Oil-Related Embryo Mortalities in PWS Pink Salmon Populations			
Proposer:	ADFG			
RPL Request:	ADFG	$85.1	Cluster:	Pink Salmon Projects
Total FY 96:	$474.6		Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. Elevated embryo motalities were detected in populations of pink salmon inhabiting oiled streams following the oil spill. The purpose of this project is to continue to monitor the recovery of pink salmon embryos in the field, provide laboratory verification of the field results, and verify and identify the occurrence of genetic damages. Results of these studies may provide the first evidence of heritable injury in fish exposed to chronic or acute sources of oil pollution.

Chief Scientist's Recommendation:

To evaluate the recovery of wild stocks of pink salmon in Prince William Sound, it is necessary to monitor embryo mortality in the field. This past season (1995) was the second year in which no statistically significant differences were found in embryo mortality between oiled and unoiled streams. However, two more years of study are required to confirm recovery in odd- and even-year stocks. The investigators have done excellent work to date. I recommend funding the field components of this project. In addition, the search for genetic evidence of heritable injury should continue on a limited basis, mainly through the andogenesis experiments. Current efforts to locate altered DNA sequences should be closed out in FY96, as they appear to have a low prospect of success.

Trustee Council Action:

Fund field monitoring and androgenesis experiments. Close out molecular genetics. Field monitoring should receive funding until there are no statistically significant differences between oiled and unoiled streams for two years for each of the odd- and even-year runs (closeout is FY 98). This is the major monitoring project for the on-going injury to and recovery of pink salmon.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96196			
Project Title:	Genetic Structure of Prince William Sound Pink Salmon			
Proposer:	ADFG			
RPL Request:	ADFG	$107.2	Cluster:	Pink Salmon Projects
Total FY 96:	$178.5		Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. Previous work found that wild-stock pink salmon suffered both direct lethal and sublethal injuries as a result of the oil spill. An understanding of the population structure of pink salmon in PWS is essential to assess the impact of these injuries on a population basis and to devise and implement management strategies for restoration. This project is designed to delineate the genetic structure of populations of wild pink salmon inhabiting PWS. (This project was formerly numbered 95320D.)

Chief Scientist's Recommendation:

This project is yielding interesting and worthwhile insights into genetic diversity among wild pink salmon in Prince William Sound, most notably east-west differences within the Sound. This work could have significant benefit for pink salmon management, and I recommend continued funding.

Trustee Council Action:

Fund. This project is designed to determine geographic extent of genetic differences in PWS pink salmon. Knowledge of the location of pink salmon stocks and genetic differences among the stocks in PWS will help refine pink salmon management areas and goals.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96255			
Project Title:	Kenai River Sockeye Salmon Restoration			
Proposer:	ADFG			
RPL Request:	ADFG	$67.2	Cluster:	Sockeye Salmon Program
Total FY 96:	$307.0		Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. Greatly reduced fishing time in upper Cook Inlet in 1989 due to the presence of oil caused sockeye salmon spawning escapements in the Kenai River to exceed the desired amount by three times. The overescapement may have reduced survival of juvenile sockeye salmon. Careful monitoring and possible reduction of Kenai River sockeye salmon harvests may be necessary to ensure adequate escapements. The goal of this project is to restore Kenai River sockeye salmon through improved stock assessment capabilities and more accurate regulation of spawning levels.

Chief Scientist's Recommendation:

This has been an excellent program, the results of which have already proven enormously valuable in managing the upper Cook Inlet mixed-stock fishery to protect Kenai River stocks. I recommend limited additional funding in FY96, after which this program should be taken over by ADFG as part of its normal management responsibilities.

Trustee Council Action:

Fund at reduced amount which reflects the beginning of a transition to agency rather than Trustee Council support; the project will be closed out in FY97. The project has proven successful in providing in-season identification of actual runs that Cook Inlet fishermen are harvesting. The information is used by fisheries managers to modify fishing areas and openings to protect Kenai/Skilak stocks.

EXXON VALDEZ OIL SPILL – FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96256		
Project Title:	Columbia and Solf Lakes Sockeye Salmon Stocking		
Proposer:	USFS		
RPL Request:	ADFG $17.4	Cluster:	Subsistence Projects
Total FY 96:	$60.8	Cooperating Federal Agencies:	USFS

Project Summary:

This project would assess the feasibility of establishing self-sustaining runs of sockeye salmon in Solf Lake and Columbia Lake. Solf Lake is located in Herring Bay on Knight Island. Data suggest it could annually produce returns of 19,000 to 22,000 sockeye. Columbia Lake is located in Heather Bay near the Columbia Glacier. Data indicate that the lake could annually produce returns of 10,000 to 29,000 sockeye.

Chief Scientist's Recommendation:

There appear to be reasonable prospects for successful establishment of self-sufficient sockeye salmon runs at Solf and possibly Columbia lakes. This is of considerable interest to subsistence users in Prince William Sound, and this project would more fully explore its feasibility. I recommend funding of this feasibility study in FY 1996.

Trustee Council Action:

Fund feasibility study. If feasible, this project could provide sockeye salmon to aid PWS subsistence, sport, and commercial fisheries.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96258A			
Project Title:	Sockeye Salmon Overescapement Project			
Proposer:	ADFG			
RPL Request:	ADFG	$136.4	Cluster:	Sockeye Salmon Program
Total FY 96:	$596.6		Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. This project provides for completion of the Kenai lakes sockeye research program, and closeout of the sockeye monitoring program for Kodiak Island lakes. The Kenai research program investigates the mechanism and extent of injury for the continued depressed returns caused by the 1989 (and previous years) overescapement into the Kenai/Skilak system.

Chief Scientist's Recommendation:

Recent analysis of the extensive limnological and fry data gathered over the last several years indicates a link between fall zooplankton abundance and fry survival in the subsequent year. This may explain sockeye salmon population cycles in these lake systems. If substantiated by further analysis, this is a major breakthrough in understanding of the Kenai R. system and perhaps sockeye salmon rearing lakes in general. I recommend approval of the funds needed to complete the Kenai R. portion of this work in FY96. This project also includes funds for continued assessment of overescapement effects at Red and Akalura lakes on Kodiak Island. The investigators for the Kodiak portion of this project have done an excellent job, but the mixed-stock fishery in waters offshore of Red and Akalura lakes greatly complicates future restoration efforts for these lakes. I do not recommend funding Kodiak work beyond FY 96.

Trustee Council Action:

Fund completion of work on the Kenai River. Close-out work this year on Kodiak portion of project consistent with Chief Scientist's recommendation. Project investigates mechanism of injury to Kenai river sockeye and monitors recovery of Kodiak sockeye runs. Review of FY 95 results indicates significant scientific breakthrough, which may explain the extent and mechanism of overescapement injury on the Kenai River. If the discovery is confirmed, it may significantly advance the understanding of the Kenai River system.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96259			
Project Title:	Restoration of Coghill Lake Sockeye Salmon			
Proposer:	ADFG			
RPL Request:	ADFG	$83.9	Cluster:	Sockeye Salmon Program
Total FY 96:	$265.7		Cooperating Federal Agencies:	USFS

Project Summary:

Continued funding for ongoing project Coghill Lake has historically been a major sockeye producer for PWS. The current production is very low and could jeopardize the sustainability of this sockeye stock without restoration efforts. This project continues a program begun in 1993 to fertilize Coghill Lake to restore the run. A restored sockeye salmon run would provide an important replacement resource for sport and commercial fisheries in PWS.

Chief Scientist's Recommendation:

This project is increasing the productive capacity of Coghill Lake for sockeye salmon through fertilization. The Trustees should continue to support lake fertilization for two more years. I do recommend continued support of the limnological monitoring, but I am concerned that interpretation of the relationship between sockeye production and lake fertilization is confounded by introduction of hatchery-produced pre-smolt, which was done independently of the Trustee-sponsored project. There needs to be further discussion of the objectives and methods of the monitoring program.

Trustee Council Action:

Fund continued fertilization through FY 97, but not hydroacoustic monitoring which has not been very effective. Smolt outmigration and limnological work will continue, but ADFG and PWSAC should undertake an expanded effort to assess returns of wild adults. Project is designed to restore Coghill Lake to its former position as a mainstay of the commercial/sport sockeye fishery in PWS. Although the injury to this fishery was not caused by the oil spill, this project has been conducted on a replacement basis for losses of other fishery resources.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96427			
Project Title:	Harlequin Duck Recovery Monitoring			
Proposer:	ADFG			
RPL Request:	ADFG	$210.1	Cluster:	Nearshore Ecosystem Projects
Total FY 96:	$261.1		Cooperating Federal Agencies:	None

Project Summary:

Continued funding for ongoing project. This project will compare population parameters between oiled and unoiled areas based on population structure, behavior, production, and growth rates. Shoreline boat surveys will be conducted simultaneously. Changes in population size, structure, and production in oiled and unoiled areas and between years will be compared. Continued population monitoring and brood surveys will allow us to assess trends and suggest factors limiting recovery.

Chief Scientist's Recommendation:

Harlequin ducks were seriously impacted by the oil spill, and there continues to be concern about their status, especially in western Prince William Sound. Based on the review session this fall, the investigators have made excellent progress in developing an approach to comparing the health of populations in eastern and western parts of the Sound. This work needs to go forward, and I recommend funding this project in FY 96.

Trustee Council Action:

Fund. This project continues basic assessment of recovery status of harlequin ducks in Prince William Sound.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96507		
Project Title:	EVOS Symposium Publication		
Proposer:	NOAA		
RPL Request:	ADEC $35.0	Cluster:	Information Support
Total FY 96:	$42.0	Cooperating Federal Agencies:	NOAA

Project Summary:

The *Exxon Valdez* Oil Spill Symposium was held in February 1993. The Trustee Council funded publication and distribution of the symposium proceedings in FY94 with a budget of $102,000. The length of the proceedings is now expected to be 51% longer than originally planned and the American Fisheries Society (AFS), the publisher, needs an additional $35,000 to complete the project.

Chief Scientist's Recommendation:

Not applicable.

Trustee Council Action:

Fund. This project completes the funding necessary to publish and distribute the proceedings of the 1993 Oil Spill Symposium. Publication furthers the Trustee Council's public information goals.

EXXON VALDEZ OIL SPILL -- FY 96 WORK PLAN
Revised Program 11 - 6 - 9992

Project Number:	96600		
Project Title:	Program Management		
Proposer:	NOAA		
RPL Request:	ADFG $51.9	Cluster:	Seabird/Forage Fish Ecosystem Project
Total FY 96:	$105.4	Cooperating Federal Agencies:	NOAA

Project Summary:

Continued funding for ongoing project. This project provides support for continued NOAA participation in *Exxon Valdez* damage assessment and management. The program manager of the Office of Oil Damage Assessment and Restoration is responsible for management and oversight of scientists and contractors as they relate to the *Exxon Valdez* Oil Spill Trustee Council. The program manager has responsibility for maintaining information and records on research schedules, work progress, and study products, and works closely with project leaders of studies to ensure that program goals, objectives, and timelines are met.

Chief Scientist's Recommendation:

Not applicable.

Trustee Council Action:

Fund.

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Nancy Slagle
Director
Division of Budget Review
Office of Management and Budget

FROM: Molly McCammon
Executive Director

DATE: December 20, 1995

RE: *Exxon Valdez* Oil Spill RPL 11-6-9993

In accordance with Chapter 1, FSSLA 1992, the Department of Natural Resources requests authority to receive and expend $42,000,000 from *Exxon Valdez* oil spill settlement trust funds to purchase 26,665.62 acres of surface estate on Shuyak Island from the Kodiak Island Borough.

This parcel of land was evaluated as part of the Trustee Council's Comprehensive Habitat Protection Process - Large Parcel Evaluation and Ranking (November, 1993) and found to be among the highest ranked parcels in the spill area.

This land provides important habitat for several species of fish and wildlife for which significant injury has been documented. These include harlequin ducks, black oystercatchers, marbled murrelets, pigeon guillemots, river and sea otters, harbor seals, Pacific herring, pink salmon, and Dolly Varden. Restoration of these injured species will benefit from acquisition of this important habitat through protection from activities and disturbances which may adversely affect their recovery. The area has exceptional scenic qualities and supports wilderness-based recreation activities including sport hunting and fishing. The area also possesses significant cultural resource values with fifteen documented historical/archaeological sites.

These lands will be managed by the Alaska Department of Natural Resources, with protection of fish and wildlife habitat and populations as the highest management

priority. Under the terms of the agreement, public use of these lands must be allowed and must include sport, personal use, and subsistence hunting, fishing, trapping and recreational uses, consistent with public safety and permitted under law or regulations of the Board of Fisheries and Board of Game. Limited commercial use may be allowed if consistent with state and federal laws and the goals of restoration.

As reflected in the Trustee Council resolution, the Trustee Council's appraisal process resulted in a finding that the Shuyak parcel has a fair market value in the range of $27 million to $33.32 million. Taking into account the basis for the various appraisal numbers, the position of the landowner as to its minimum selling price, and given the exceptional restoration values of the Shuyak lands, the Council felt an offer at the upper end of that range was appropriate. The appraised value is based upon a single cash payment of $33.32 million. Because the payments will be over a period of eight years, in lieu of interest, the purchase price has been adjusted to a total purchase price of $42 million. It should be noted here that the Kodiak Island Borough commissioned three separate appraisals on their own, and these ranged in value from $36 million to $54 million.

There has been widespread support for this acquisition. The Kodiak Island Borough has committed $6 million to be received through this sale to expand the existing Fisheries Technology Center. This expansion, referred to as the Near Island Research Facility, will provide for the consolidation of federal and state fisheries agencies in Kodiak, which will greatly increase their ability to respond to fisheries management and research needs. Borough Mayor Jerome Selby has provided additional information on this facility in his enclosed letter of endorsement.

Additional documentation supporting this request is also being provided:

- Trustee Council Resolution dated December 11, 1995
- Restoration Benefits Report
- Map
- Appraisal information (selections)
- Endorsement from Kodiak Island Borough
- Photos
- Letters of support

Since this is a capital project, authority to receive and expend subject to AS 37.25.020 is requested. If you have any questions about this RPL, please do not hesitate to contact me at 278-8012.

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 20, 1995

Dr. Sievert A. Rohwer, Associate Director
Thomas Burke Memorial Washington
State Museum - DB-10
University of Washington
Seattle, Washington 98195

Dear Dr. Rohwer:

Thank you for your letter of November 3 regarding the need for additional funds to complete the processing of bird carcasses salvaged from the *Exxon Valdez* oil spill and brought to The Burke Museum. We recognize the possible value of these carcasses to restoration studies following the oil spill and to ornithology more broadly. Unfortunately, funding decisions for Fiscal Year 1996 have now been made, and we do not have discretionary funds that can be allocated for this purpose.

We have discussed your request with representatives of the US Fish and Wildlife Service and our Chief Scientist, and we have possible interest in preservation of skeletons and skins of those species, including common murre, pigeon guillemot, and harlequin duck, considered by the Trustee Council to have sustained significant injury by the oil spill. There also is interest in the black-legged kittiwake, which is a central species in a large-scale project on seabirds and forage fish in the northern Gulf of Alaska.

Dr. Ken Warheit, a Research Associate at the University of Washington, had mentioned to Stan Senner, the Trustee Council's Science Coordinator, that part of the museum's immediate problem is the need to free up freezer space. If this is the case, would you consider destroying the other specimens (puffins, fulmars, etc.) and then submitting a proposal for preservation of the four injured species listed above? This would help alleviate your need for freezer space and give you the opportunity to submit a proposal for funds to process the rest. Proposals for FY 1997 funding (available October 1, 1996) are due at the Restoration Office on April 15, 1996. If this suggestion is worthwhile, we will mail you a copy of the FY 1997 Invitation when it is available in mid-February. Please contact Stan Senner if you have questions about submission of a proposal.

Thank you for your inquiry. We appreciate your efforts to preserve some of the EVOS bird carcasses for the benefit of the restoration program and ornithology.

Sincerely,

Molly McCammon
Executive Director

MM/kh
cc: Ken Warheit, PSG
Robert Spies, Chief Scientist
Catherine Berg, DOI

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

FAX COVER SHEET

To: Dr S. Rohwer Number: 206-685-3039

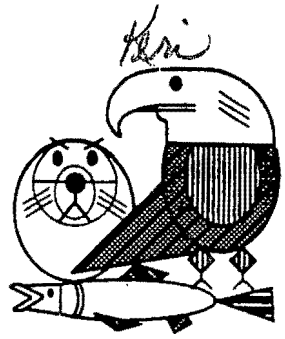
From: John Renner Date: 12-20-95

Comments: Total Pages: 3

Document Sent By: KDH

2/15/95

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



MEMORANDUM

TO: All Staff

FROM: Eric F. Myers, Director of Operations

DATE: 12/19/95

SUBJ: Attached Computer Questionnaires

Please find attached two questionnaires provided by Network Business Systems (NBS), the firm selected to provide the Restoration Office with network support services. NBS staff will be visiting the Restoration Office this afternoon and working on the network over the next couple months.

During the course of the contract, NBS will be based out of the small conference room on the 4th floor (the "gloom room"). Please assist them with their efforts and let me know if you have any questions or concerns that you would like to relay. We will attempt to schedule network support activities in a manner that minimizes disruptions to the office work.

Please fill out the first form in its entirety (System Audit: User Feedback Survey) and the first part above the dashed line on the second (User Documentation Worksheet).

A manila envelope is hanging on the wall just outside my office door next to the mailboxes. Please deposit the completed forms there.

Thanks.

Is an adequate printer available for your use? If not, then what would be an adequate printer?

Do you ever experience a loss of productivity while waiting for a print job to finish. If so, then estimate how much productivity loss you experience in a month?

Do you ever experience problems while attempting to print? If so, then describe the problem.

Do you ever experience a loss of productivity while waiting for the computer to respond. Describe any operations on your computer that require a significant amount of time.

How long does it take for you to boot your computer and log into the network?

What menu system or other "front-end" user interface (i.e. Windows) is available to help run your application programs? Do you prefer to use this "front-end" system or to work from the DOS prompt? Why?

Who is available to answer application program related questions? Is their help effective? If not, then why?

Who is available to help with general problems and computer malfunctions? Is their help effective? If not, then why?

Are there any computer or video related help systems available for your use? Do you use them? Are they effective? If not, then why?

User Documentation Worksheet

Full Name: _____ Department: _____

Title: _____ Login Name: _____

Phone/ext.: _____ Initial Password (optional): _____

__ Primary Network System Manager ___Special Purpose Account (system maint. only)

__ Alternate or Backup System Manager ___Tape Backup Operator

Primary Location of this User _____ (station number ____)

Primary Application(s): _____

_____

Explicit Access or Restrictions: _____

_____

_____ Preferred Default Printer: _____

ANALYSIS - Views, apprehensions and attitudes in terms of this project: _____

_____

_____

_____

ANALYSIS - How is this person affected by this project? _____

_____

_____

_____

ANALYSIS - Summary of computer and software capabilities: _____

_____

_____

_____

Is a File Server Console Operator:_____ Maximum Concurrent Connections: _____

Max. Disk Space Limit:_____ Minimum Password Length:_____

Days Between Password Changes:_____ Password Required?_____

Unique Password After Changes?_____ Allowed To Change Password?_____

Number of Grace Logins After Expiration:____ Account Expiration Date:_____

Is a Supervisor Equivalent?_____ Can Create New Users or Groups?_____

This Account **is Managed by**:_____

This Account **Manages**:_____

This Account Operates Print **Queues**:_____

This Account Operates Print **Servers**:_____

Is a Member of Network Groups:_____

Allowed Network Login Times:_____

Allowed Network Workstations:_____

System Audit: User Feedback Survey

Date of Survey: _____

Your Name (optional): _____

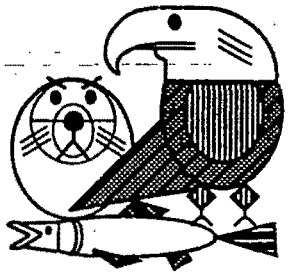
Organization/Department: _____

Is electronic mail software is installed for your use? Do you use it? If not, then why don't you use the electronic mail system?

Do you ever experience error messages on your computer? Common error messages are "Invalid COMMAND.COM" or "Invalid DOS Version". Describe the error message(s) and how frequently they occur.

Does your computer ever "hang" or "crash"? If so, then how often? What sequence of events causes this problem?

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

Dave Gibbons
U.S. Forest Service
POB 21628
Juneau, Alaska 99802-1628

Dear Dave:

This letter is to inform you that, at its December 11 meeting, the *Exxon Valdez* Trustee Council approved additional program management funds for the following projects in the following amounts:

96007A/Archaeological Index Site Monitoring	$3,500
96220/Eastern PWS Wildstock Salmon Habitat Restoration	$6,900
96320Q/Avian Predation on Herring Spawn	$7,700

All three of these projects have already been authorized to proceed by the Executive Director. No additional authorization is needed in regard to these additional funds.

Sincerely,

Molly McCammon
Executive Director

cc: Ray Thompson, USFS
Traci Cramer, EVOS

Exxon Valdez Oil Spill Trustee Council

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645 G Street, Suite 401, Anchorage, Alaska 99501-3451
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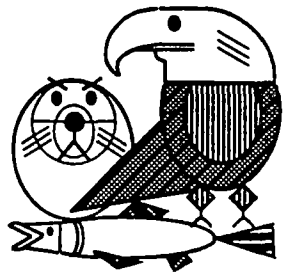

December 19, 1995

David Scheel
Prince William Sound Science Center
POB 705
Cordova, Alaska 99574

Dear David:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved additional funds for Project 96009D, Survey of Octopuses in Intertidal Habitats. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. Project addresses the concern that octopus and chiton stocks were depleted by the oil spill and that subsistence uses are impaired. FY 95 pilot effort was successful in locating octopus in Prince William Sound, developing survey methods, and providing information about the life history of octopus.

All reviews and NEPA analysis have been completed on this project. Therefore, you are authorized to proceed with the deferred portion of the project consistent with the Detailed Project Description and the revisions to the DPD outlined in your November 21, 1995 letter to Dr. Spies.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Dave Gibbons, USFS
Bob Spies
Traci Cramer

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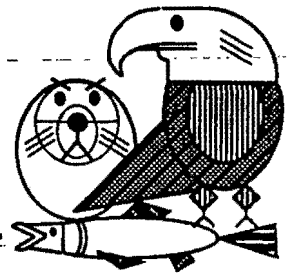

December 19, 1995

Ernie Piper
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, Alaska 99501

Dear Ernie:

This letter is to formally notify you that, at its December 11 meeting, the *Exxon Valdez* Trustee Council approved a budget reduction of $20,200 for Project 96027, Kodiak Archipelago Shoreline Assessment: Monitoring Surface and Subsurface Oil. In addition, the Trustees approved reprogramming some funds toward developing and assessing information about future monitoring needs and alternative shoreline treatments.

Project 96027 has already been authorized to proceed by the Executive Director, and a revised budget and project description have been received and reviewed by Trustee Council staff. No additional authorization is needed in regard to this reduction and reprogramming of funds.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Bob Loeffler

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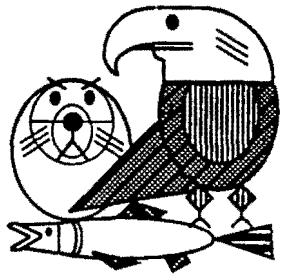


December 19, 1995

Dan Gillikin
USFS, Glacier Ranger District
POB 129
Girdwood, Alaska 99587

Dear Mr. Gillikin:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96043B, Monitoring of Cutthroat Trout and Dolly Varden Habitat Improvement Structures. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. Project monitors results of previous work. Recommendation is for FY 96 only. It is unclear whether additional monitoring is necessary. Re-evaluate after FY 96.

All reviews and NEPA analysis have been completed on this project. Therefore, you are authorized to proceed with the project as described in the revised Detailed Project Description and consistent with the Trustee Council's approval.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

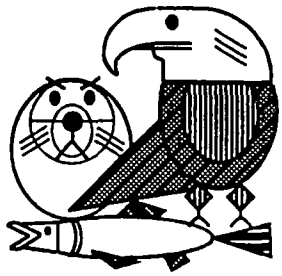
Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Dave Gibbons, USFS
Traci Cramer

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

Gregory T. Ruggerone
Natural Resources Consultants
4055 21st Avenue West
Seattle, Washington 98199

Dear Dr. Ruggerone:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved Project 96048-BAA, Historical Analysis of Sockeye Salmon Growth Among Populations Affected by Overescapement in 1989.

All reviews and NEPA analysis have been completed on this project. Therefore, this letter authorizes the lead agency (NOAA) to execute a contract with you to begin the project, as described in the Detailed Project Description and supplemental letter to Sandra Schubert dated July 12, 1995.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Byron Morris, NOAA
Traci Cramer

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
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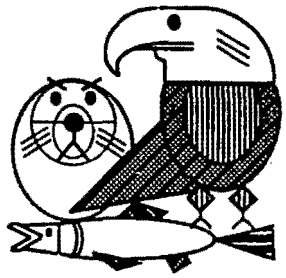

December 19, 1995

Mark Kuwada
Alaska Department of Fish & Game
Division of Habitat and Restoration
333 Raspberry Road
Anchorage, Alaska 99518

Ken Holbrook
US Forest Service
3301 C Street, Suite 300
Anchorage, Alaska 99503

Dear Mark and Ken:

The Trustee Council received more than $35 million in proposals for fiscal year 1996. Unfortunately, it was not possible to fund all projects that were submitted.

On December 11, 1995, the *Exxon Valdez* Oil Spill Trustee Council acted on your proposal for the FY 1996 Work Plan: Project 96058, Landowner Assistance. This letter is to inform you that the Trustee Council accepted the following Executive Director's recommendation and did not fund the project.

> Do not fund. Assistance with project development and facilitation already funded under 96052. Restoration activities associated with land acquisition should be addressed during negotiation process. Other objectives are appropriate to the extent that they go beyond what is clearly normal agency management.

For your information, I am enclosing a summary of Trustee Council action taken on the FY 96 Work Plan. Your interest in the restoration program is appreciated and we hope that you will consider submitting proposals in future years.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Dr. Joe Sullivan
Dr. Dave Gibbons

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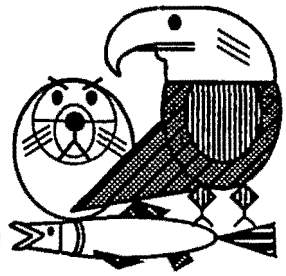


December 19, 1995

Alex Wertheimer
NMFS Auke Bay Laboratory
11305 Glacier Highway
Juneau, Alaska 99801

Dear Alex:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funding for Project 96076, Effects of Oiled Incubation Substrate on Straying and Survival of Wild Pink Salmon. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. NOAA has proposed reducing this project from five to four years, and has offered significant cost sharing. In combination with 96191B, this work will provide useful information on marine survival and straying that will have broad application to salmon management.

Because the scope of the project is reduced from the original submission, please submit a revised budget, and either a revised Detailed Project Description or a letter describing how the existing project description is changed. Following review of the revised DPD (or letter) and budget, you will receive authorization from the Executive Director for use of the funds approved on December 11th.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

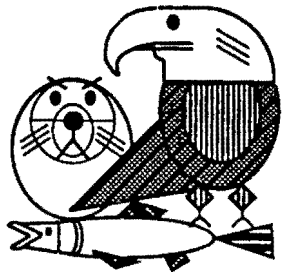
Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Byron Morris, NOAA

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

William W. Smoker
UAF, Juneau Center, School of Fisheries
11120 Glacier Highway
Juneau, Alaska 99801

Dear Dr. Smoker:

The Trustee Council received more than $35 million in proposals for fiscal year 1996. Unfortunately, it was not possible to fund all projects that were submitted.

On December 11, 1995, the *Exxon Valdez* Oil Spill Trustee Council acted on your proposal for the FY 1996 Work Plan, Project 96093A/Restoration of Prince William Sound Pink Salmon by Diversion of Harvest Effort: Quantitative Genetic Assessment of Early-Returning Pink Salmon Broodstock. This letter is to inform you that the Trustee Council accepted the following recommendation from the Executive Director and did not fund the project.

> Do not fund. The proposed seven-year project is a major commitment of funds. Its value to restoration is unclear given that it is inconsistent with ADF&G genetic policy, which may prohibit implementing results.

For your information, I am enclosing a summary of Trustee Council action taken on the FY 96 Work Plan. Your interest in the restoration program is appreciated and we hope that you will consider submitting proposals in future years.

Sincerely,

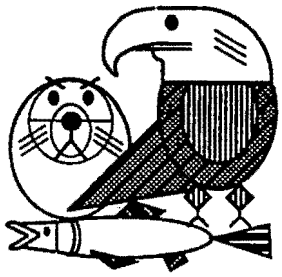
Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

Stephen Jewett
Institute of Marine Science
University of Alaska Fairbanks
General Delivery
Fairbanks, Alaska 99775

Dear Steve:

This letter is to inform you that, at its December 11 meeting, the *Exxon Valdez* Trustee Council approved an additional $3,100 for Project 96106, Subtidal Monitoring: Eelgrass Communities. The additional funds are for NOAA's sample analysis, based on the cost estimates presented in your letter of November 28, 1995 to Dr. Joe Sullivan.

Project 96106 has already been authorized to proceed by the Executive Director. No additional authorization is needed in regard to this additional funding.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan. Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Patty Brown-Schwalenberg, Executive Director
Chugach Regional Resources Commission
4201 Centre Drive, Suite 211
Anchorage, Alaska 99508

Dear Patty:

This letter is to inform you that, at its December 11 meeting, the *Exxon Valdez* Trustee Council approved an additional $10,000 for Project 96052, Community Involvement and Use of Traditional Knowledge. The funds were added to the travel line, to allow additional community members to attend the Trustee Council's 1996 Restoration Workshop as requested at the Community Conference on Subsistence and the Oil Spill in September.

All reviews and NEPA analysis have been completed on this project. Therefore, ADF&G/ Subsistence Division is authorized to proceed with an amendment to their contract with CRRC for this project. However, please be aware that funds administered by the Trustee Council may not be spent by a state agency unless approved by the Legislative Budget and Audit Committee. The committee is scheduled to consider the Trustee Council's December authorizations on January 8th.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

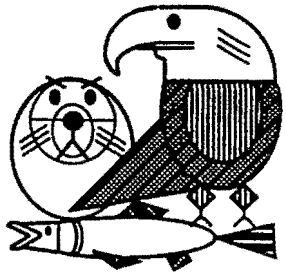
Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan, ADF&G
Rita Miraglia, ADF&G
Martha Vlasoff, Community Coordinator
Traci Cramer

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

Patty Brown-Schwalenberg, Executive Director
Chugach Regional Resources Commission
4201 Tudor Centre Drive, Suite 211
Anchorage, Alaska 99508

Dear Patty:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96131, Chugach Native Region Clam Restoration. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund continuing pilot effort in Port Graham, Nanwalek, and Tatitlek. Fund initial beach surveys in Chenega and Ouzinkie, and analysis of clam predator problem in Cordova (Native Village of Eyak). Funding is contingent on approval of Detailed Project Description, which must address hatchery issues raised by peer reviewers. Project is intended to establish subsistence clam populations as replacement for subsistence resources injured by the oil spill.

Before funds may be spent on the project, the lead agency (ADF&G) must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act have been met. In addition, the revised Detailed Project Description submitted on December 6 must be approved by the Chief Scientist. Once NEPA and scientific review of the DPD are complete, ADF&G will be authorized to execute a contract with CRRC to undertake the project.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan. Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Joe Sullivan, ADF&G

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Michael L. Murphy
NMFS Auke Bay Laboratory
11305 Glacier Highway
Juneau, Alaska 99801

Dear Mr. Murphy:

The Trustee Council received more than $35 million in proposals for fiscal year 1996. Unfortunately, it was not possible to fund all projects that were submitted.

On December 11, 1995, the *Exxon Valdez* Oil Spill Trustee Council acted on your proposal for the FY 1996 Work Plan: Project 96194, Pink Salmon Spawning Habitat Recovery. This letter is to inform you that the Trustee Council accepted the following recommendation from the Executive Director and did not fund the project for FY 96.

> Do not fund at this time. Samples are in freezer and stable. Project will be more meaningful once results of 96191 are fully available. This project ties actual concentrations of oil as obtained from field samples in 1989, 1990, and 1995 in pink salmon streams to embryo mortalities and illuminates the role of direct exposure in potentially causing the observed multi-year effects in pink salmon embryos.

For your information, I am enclosing a summary of Trustee Council action taken on the FY 96 Work Plan. Your interest in the restoration program is appreciated and we anticipate considering the proposal again in the future.

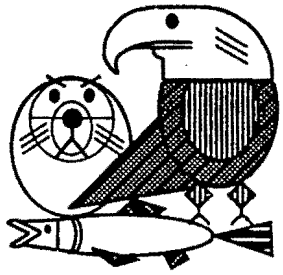
Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Byron Morris, NOAA

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 19, 1995

Ms. Margaret L. Roberts
President, Kodiak Tribal Council
POB 1974
Kodiak, Alaska 99619

Dr. John S. French
School of Fisheries & Ocean Sciences
P.O. Box 757220
Fairbanks, Alaska 99775-7220

Dear Ms. Roberts and Dr. French:

The Trustee Council received more than $35 million in proposals for fiscal year 1996. Unfortunately, it was not possible to fund all projects that were submitted.

On December 11, 1995, the *Exxon Valdez* Oil Spill Trustee Council acted on your proposal for the FY 1996 Work Plan, Project 96212/Restoration of Subsistence Shellfish Consumption: A PSP Screening Program. This letter is to inform you that the Trustee Council accepted the following Executive Director's recommendation and did not fund the project.

> Do not fund. Benefits require on-going rather than one-time monitoring of PSP, and on-going funding source is not identified. The Alaska Department of Environmental Conservation has indicated a financial inability to take over the project. In addition, concerns identified by Chief Scientist and concerns about liability have not been resolved.

For your information, I am enclosing a summary of Trustee Council action taken on the FY 96 Work Plan. Your interest in the restoration program is appreciated and we hope that you will consider submitting proposals in future years.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Ernie Piper, ADEC

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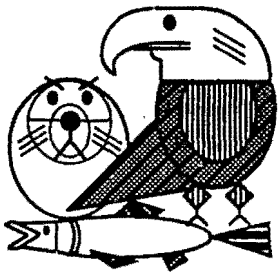

December 19, 1995

Peter Selanoff
Chenega Bay IRA Council
General Delivery
Chenega Bay, Alaska 99574

Dear Mr. Selanoff:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96222, Chenega Bay Salmon Restoration--Anderson Creek. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. Technical questions raised during scientific peer review have been addressed. Project will replace subsistence services lost due to the oil spill by opening up additional spawning and rearing habitat for salmon on Anderson Creek near the village of Chenega.

All reviews have been completed on this project. Therefore, this letter authorized the lead agency (U.S. Forest Service) to expend funds for work associated with the preparation of environmental compliance documents for Project 96222.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan. Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Dave Gibbons, USFS
Traci Cramer

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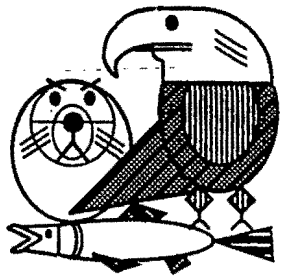

December 19, 1995

Dr. Lisa Seeb
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

Dear Lisa:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96255, Kenai River Sockeye Salmon Restoration. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund at reduced amount which reflects the beginning of a transition to agency rather than Trustee Council support; the project will be closed out in FY97. The project has proven successful in providing in-season identification of actual runs that Cook Inlet fishermen are harvesting. The information is used by fisheries managers to modify fishing areas and openings to protect Kenai/Skilak stocks.

Because the project changed from the original submission, please submit a revised Detailed Budget and either a revised Detailed Project Description or a letter describing how the existing DPD is changed. Following review of the revised budget DPD (or letter), you will receive authorization from the Executive Director for use of the funds approved on December 11th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Dr. Joe Sullivan, ADF&G

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Ray Thompson
Chugach National Forest
3301 C Street, Suite 300
Anchorage, Alaska 99503

Dear Ray:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96256, Columbia and Solf Lakes Sockeye Salmon Stocking. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund feasibility study. If feasible, this project could provide sockeye salmon to aid Prince William Sound subsistence, sport, and commercial fisheries.

All reviews have been completed on this project. Therefore, you are authorized to expend funds for work associated with the preparation of environmental compliance documents for Project 97256.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

cc: Dave Gibbons, USFS

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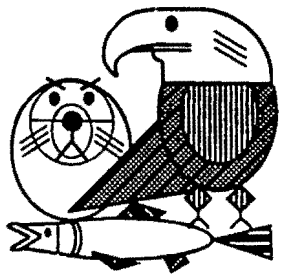

December 19, 1995

Dana Schmidt
Alaska Department of Fish and Game
34828 Kalifonsky Beach Road
Soldotna, Alaska 99669

Dear Dana:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved additional funds for Project 96258A, Sockeye Salmon Overescapement Project. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund completion of work on the Kenai River. Close out work this year on Kodiak portion of project consistent with Chief Scientist's recommendation. Project investigates mechanism of injury to Kenai river sockeye and monitors recovery of Kodiak sockeye runs. Review of FY 95 results indicates significant scientific breakthrough, which may explain the extent and mechanism of overescapement injury on the Kenai River. If the discovery is confirmed, it may significantly advance the understanding of the Kenai River system.

Because the scope of the project has changed from the original submission, please submit a revised budget, and a revised Detailed Project Description or a letter describing the changes. Following review of the revised budget and DPD (or letter), you will receive authorization from the Executive Director for use of the funds approved on December 11th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Dr. Joe Sullivan, ADF&G

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Dana Schmidt
Alaska Department of Fish and Game
34828 Kalifornsky Beach Road
Soldotna, Alaska 99669

Dear Dana:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96259, Restoration of Coghill Lake Sockeye Salmon. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund continued fertilization through FY 97, but not hydroacoustic monitoring which has not been very effective. Smolt outmigration and limnological work will continue, but the Alaska Department of Fish and Game and the Prince William Sound Aquaculture Corporation should undertake an expanded effort to assess returns of wild adults. Project is designed to restore Coghill Lake to its former position as a mainstay of the commercial/sport sockeye fishery in PWS. Although the injury to this fishery was not caused by the oil spill, this project has been conducted on a replacement basis for losses of other fishery resources.

Because the scope of the project has changed from the original submission, please submit a revised budget, and a revised Detailed Project Description or a letter describing the changes. Following review of the revised budget and DPD (or letter), you will receive authorization from the Executive Director for use of the funds approved on December 11th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure/cc: Dr. Joe Sullivan, ADF&G

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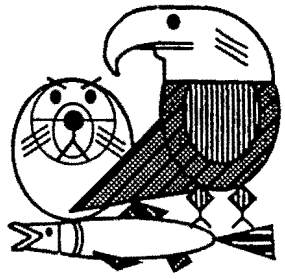

December 19, 1995

Bruce Wright
NOAA, NMFS
11305 Glacier Highway
Juneau, Alaska 99801-8626

Dear Bruce:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved funds for Project 96507, EVOS Symposium Publication. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. This project completes the funding necessary to publish and distribute the proceedings of the 1993 Oil Spill Symposium. Publication furthers the Trustee Council's public information goals.

Before you are authorized to begin spending on this project, a detailed budget must be submitted and reviewed. Following review of the budget, you will receive authorization from the Executive Director for use of the funds approved on December 11th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan. Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Fred W. Allendorf
Division of Biological Sciences
University of Montana
Missoula, Montana 59812

Dear Fred:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved Project 96190, Construction of a Linkage Map for the Pink Salmon Genome. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund. This project provides fundamental information which will likely aid restoration of wild salmon stocks of pink salmon and which are likely to benefit all pink salmon management in the future. It is a long-term project with national importance. Recommendation is to provide two years of funding at the requested level, but proposer should seed additional funding sources in future years. In addition, the proposer should coordinate with similar work being conducted at the University of Alaska.

Before the project may begin, the lead agency for the project (ADF&G) must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act have been met. In addition, because the budget was reduced from the original submission, you must submit a revised budget, and either a revised Detailed Project Description or a letter describing how the existing project description is changed. Funds will be available to the Alaska Department of Fish and Game to execute a contract with you following certification of NEPA compliance, and following a brief review of the budget and project description (or letter).

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan, ADF&G

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Restoration Office
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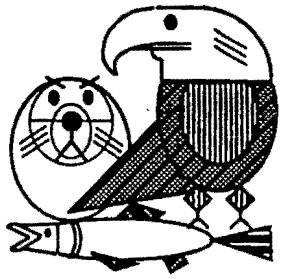

December 19, 1995

Dr. James Seeb
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

Dear Jim:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved additional funds for Project 96196, Genetic Structure of Prince William Sound Pink Salmon.

All review and NEPA analysis has been completed on this project. Therefore, you are authorized to proceed with the deferred portion of the project as outlined in the Detailed Project Description. However, please be aware that funds administered by the Trustee Council may not be spent by a state agency unless approved by the Legislative Budget and Audit Committee. The committee is scheduled to consider the Trustee Council's December authorizations on January 8th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan, ADF&G
Traci Cramer
Bob Spies

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 19, 1995

Dr. James Seeb
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

Dear Jim:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved additional funds for Project 96191A, Oil-Related Embryo Mortalities in Prince William Sound Pink Salmon Populations. The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund field monitoring and androgenesis experiments. Close out molecular genetics. Field monitoring should receive funding until there are no statistically significant differences between oiled and unoiled streams for two years for each of the odd- and even-year runs (closeout is FY 98). This is the major monitoring project for the on-going injury to and recovery of pink salmon.

All reviews and NEPA analysis has been completed on this project. Therefore, you are authorized to proceed with the deferred portion of the project as described in the Detailed Project Description and consistent with the Trustee Council's approval. However, please be aware that funds administered by the Trustee Council may not be spent by a state agency unless approved by the Legislative Budget and Audit Committee. The committee is scheduled to consider the Trustee Council's December authorizations on January 8th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Joe Sullivan, ADF&G
Traci Cramer
Bob Spies

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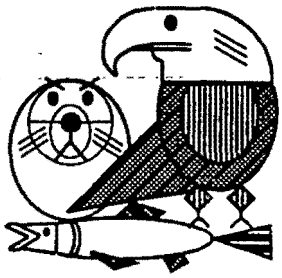

December 19, 1995

Ronald A. Heintz
NMFS Auke Bay Laboratory
11305 Glacier Highway
Juneau, Alaska 99801

Dear Mr. Heintz:

The *Exxon Valdez* Trustee Council acted upon deferred projects for the Fiscal Year 1996 Work Plan at their meeting on December 11, 1995. I am pleased to inform you that the Trustee Council approved additional funds for Project 96191B, Injury to Salmon Eggs and Pre-emergent Fry Incubated in Oiled Gravel (Laboratory Study). The Trustee Council approved the project including the following recommendation from the Executive Director:

> Fund, but combine future work with 96076. This project provides important laboratory confirmation of field observation. Project should be continued into second generation of pink salmon. This project is a laboratory companion to 96191A.

Because the scope of the project has changed from the original submission, please submit either a revised project description or a letter describing how the existing project description is changed as well as a revised detailed budget. Following review of the revised DPD (or letter) and Budget, you will receive authorization from the Executive Director for use of the funds approved on December 11th.

For your information, I am enclosing a spreadsheet that summarizes Trustee Council action on the FY 96 Work Plan.

Thank you for your participation in the *Exxon Valdez* oil spill restoration program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Molly McCammon
Executive Director

Enclosure
cc: Byron Morris, NOAA

Summary of Trustee Council Action by Project: Research, Monitoring, General Restoration

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
Pink Salmon Projects		$3,604.8	**$2,017.5**	**$1,268.5**	**$775.2**	**$163.8**	**$4,225.0**	
96076	Effects of Oiled Incubation Substrate on Straying and	$393.8	$393.8			$0.0	$393.8	Fund
96093A	Restoration of PWS Pink Salmon by Diversion of Harvest	$111.9	$0.0			$0.0	$0.0	Do not fund
96093B	Restoration of PWS Pink Salmon by Diversion of Harvest	$121.0	$0.0				$0.0	Do not fund
96093C	Restoration of Prince William Sound Pink Salmon by	$647.0	$0.0			$0.0	$0.0	Do not fund
96139A1	Salmon Instream Habitat and Stock Restoration - Little	$55.0	$55.0	$35.0	$15.0	$0.0	$105.0	Fund
96139A2	Spawning Channel Construction Project Port Dick Creek,	$230.5	$230.5	$37.0	$23.2	$30.0	$320.7	Fund
96139C1	Montague Riparian Rehabilitation Monitoring Program	$43.1	$9.7	$0.0	$0.0	$0.0	$9.7	Fund
96139C2	Salmon Instream Habitat and Stock Restoration - Lowe	$174.6	$0.0				$0.0	Withdrawn
96139D	Supplemental Monitoring for the Proposed Spawning	$9.2	$0.0				$0.0	Do not fund
96179	Relationships Between Stream Habitat and Stream	$218.1	$0.0				$0.0	Do not fund
96186	Coded Wire Tag Recoveries From Pink Salmon in Prince	$260.5	$254.9	$260.5	$260.5	$85.0	$860.9	Fund
96188	Otolith Thermal Mass Marking of Hatchery Reared Pink	$95.2	$93.2	$100.5	$100.5	$48.8	$343.0	Fund
96190	Construction of a Linkage Map for the Pink Salmon Genome	$240.0	$167.7	$250.0			$417.7	Fund
96191A	Oil-Related Embryo Mortalities in PWS Pink Salmon	$474.6	$474.6	$407.0	$246.0	$0.0	$1,127.6	Fund
96191B	Injury to Salmon Eggs and Pre-emergent Fry Incubated in	$169.3	$159.6	$0.0	$0.0	$0.0	$159.6	Fund
96194	Pink Salmon Spawning Habitat Recovery	$182.5	$0.0				$0.0	Do not fund
96196	Genetic Structure of Prince William Sound Pink Salmon	$178.5	$178.5	$178.5	$130.0	$0.0	$487.0	Fund
Herring Projects		$1,581.8	**$1,323.0**	**$930.6**	**$708.7**	**$0.0**	**$2,962.3**	
96074	Herring Reproductive Impairment	$347.7	$140.0	$0.0	$0.0	$0.0	$140.0	Fund
96162	Investigations of Disease Factors Affecting Declines of	$635.0	$635.0	$510.6	$461.7	$0.0	$1,607.3	Fund
96164	[redacted]fic Herring Program Leadership	$49[redacted]	$0.0				$0.0	With[redacted]

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
96165	Genetic Discrimination of Prince William Sound Herring	$105.8	$103.9	$120.0	$97.0	$0.0	$320.9	Fund
96166	Herring Natal Habitats	$444.1	$444.1	$300.0	$150.0	$0.0	$894.1	Fund
Sound Ecosystem Assessment (SEA)		$4,802.3	**$4,533.4**				**$4,533.4**	
96320E	Salmon and Herring Predation	$670.5	$637.7				$637.7	Fund
96320G	Phytoplankton and Nutrients	$162.2	$162.2				$162.2	Fund
96320H	Zooplankton in the PWS Ecosystem	$329.9	$323.6				$323.6	Fund
96320I	Isotope Tracers - Food Webs of Fish	$195.8	$195.8				$195.8	Fund
96320J	Information Systems and Model Development	$489.9	$482.7				$482.7	Fund
96320K	PWSAC: Experimental Fry Release	$61.4	$61.4				$61.4	Fund
96320M	Physical Oceanography in PWS	$506.9	$499.4				$499.4	Fund
96320N	Nekton/Plankton Acoustics	$487.6	$487.6				$487.6	Fund
96320Q	Avian Predation on Herring Spawn	$40.4	$40.4				$40.4	Fund
96320R	SEA Trophodynamic Modeling and Validation Through	$204.0	$202.7				$202.7	Fund
96320T	Juvenile Herring Growth and Habitat Partitioning	$1,234.6	$1,141.6				$1,141.6	Fund
96320U	Energetics of Herring and Pollock	$190.3	$189.5				$189.5	Fund
96320Y	Variation in Local Predation Rates on Hatchery-Released Fry	$120.0	$40.0				$40.0	Fund
96320Z1	Synthesis and Integration	$68.8	$68.8				$68.8	Fund
96320Z2	Sound Ecosystem Assessment (SEA): Coordination &	$40.0	$0.0				$0.0	Do not fund
SEA Program -- Related Projects		$377.3	**$114.8**	**$85.0**	**$85.0**	**$0.0**	**$284.8**	
96054	Mass-Balance Model of Trophic Fluxes in Prince William	$105.9	$0.0				$0.0	Do not fund
96193-BAA	Flux and Nutritional Quality of Particulate Organic Carbon:	$156.6	$0.0				$0.0	Do not fund
96195	Pristane Monitoring in Mussels and Predators of Juvenile	$114.8	$114.8	$85.0	$85.0	$0.0	$284.8	Fund

Summary of Trustee Council Action by Project: Research, Monitoring, General Restoration

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
Sockeye Salmon Program		$2,156.8	**$1,286.2**	**$391.0**	**$0.0**	**$0.0**	**$1,677.2**	
96048-BAA	Historical Analysis of Sockeye Salmon Growth Among	$116.9	$116.9	$0.0	$0.0	$0.0	$116.9	Fund
96255	Kenai River Sockeye Salmon Restoration	$447.9	$307.0	$100.0	$0.0		$407.0	Fund
96258A	Sockeye Salmon Overescapement Project	$907.8	$596.6	$150.0	$0.0	$0.0	$746.6	Fund
96258B	Sockeye Salmon Skilak Lake Enclosure Project	$341.1	$0.0				$0.0	Do not fund
96258C	Kenai River Ecosystem Restoration: Starvation-Temperature	$57.3	$0.0				$0.0	Do not fund
96259	Restoration of Coghill Lake Sockeye Salmon	$285.8	$265.7	$141.0	$0.0	$0.0	$406.7	Fund
Cutthroat and Dolly Varden Trout Projects		$565.1	**$229.6**	**$200.0**	**$100.0**	**$0.0**	**$529.6**	
96043A	Cutthroat Trout and Dolly Varden Char Population and	$29.6	$0.0				$0.0	Do not fund
96043B	Monitoring of Cutthroat Trout and Dolly Varden Habitat	$40.4	$29.6				$29.6	Fund
96043C	Cutthroat Trout Habitat Improvement Structures	$100.2	$0.0				$0.0	Do not fund
96145	Cutthroat Trout and Dolly Varden: the Relation Among and	$336.7	$200.0	$200.0	$100.0	$0.0	$500.0	Fund
96177A	Cutthroat Trout, Dolly Varden Char Habitat Restoration,	$26.6	$0.0				$0.0	Do not fund
96177B	Cutthroat Trout, Dolly Varden Char Habitat Restoration,	$31.6	$0.0				$0.0	Do not fund
Marine Mammal Program		$1,193.6	**$812.8**	**$687.3**	**$275.1**	**$25.0**	**$1,800.2**	
96001	Recovery of Harbor Seals from EVOS: Condition and	$214.1	$214.1	$192.3	$48.1	$0.0	$454.5	Fund
96012A-BAA	Comprehensive Killer Whale Investigation in Prince William	$167.5	$101.0				$101.0	Fund
96012B	Impact of Killer Whale Predation on the Recovery of Injured	$229.5	$0.0				$0.0	Do not fund
96064	Monitoring, Habitat Use, and Trophic Interactions of Harbor	$381.1	$347.3	$347.0	$100.0	$25.0	$819.3	Fund
96121-BA	table Isotope Ratios and Fatty Acid Signatures of Selected	$	$0.0				$0.0	Do nd

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
96170	Isotope Ratio Studies of Marine Mammals in Prince William	$150.4	$150.4	$148.0	$127.0	$0.0	$425.4	Fund
Nearshore Ecosystem Projects		$6,724.8	**$2,989.2**	**$1,869.3**	**$1,789.4**	**$920.0**	$7,567.9	
96025	Mechanism of Impact and Potential Recovery of Nearshore	$1,859.9	$1,859.9	$1,669.4	$1,669.4	$450.0	$5,648.7	Fund
96027	Kodiak Archipelago Shoreline Assessment: Monitoring	$39.8	$39.8	$0.0	$0.0	$0.0	$39.8	Fund
96037	Coastal Habitat Intertidal Monitoring	$609.2	$0.0				$0.0	Do not fund
96056	Sea Otter Transplantation/Clam Restoration		$0.0				$0.0	Do not fund
96067-BAA	Juvenile Fish Habitat Identification and Assessment	$467.4	$0.0				$0.0	Do not fund
96072	Status and Potential Recovery of the Black Oystercatcher:	$157.7	$0.0				$0.0	Do not fund
96086	Herring Bay Monitoring and Restoration Studies	$185.3	$173.0	$0.0	$0.0	$0.0	$173.0	Fund
96088	Fucus as Structure for Other Organisms	$302.5	$0.0				$0.0	Do not fund
96090	Mussel Bed Restoration and Monitoring	$209.7	$205.1	$0.0	$0.0	$0.0	$205.1	Fund
96094	Improving Recovery Rates on Shorelines in PWS Using	$965.6	$0.0				$0.0	Do not fund
96103-BAA	Whale Forestomach Anaerobic Microbes to Detoxify Oil Spills	$170.7	$0.0				$0.0	Do not fund
96104	Avian Predation on Blue Mussels in Prince William Sound	$127.1	$0.0				$0.0	Included in 96025
96106	Subtidal Monitoring: Eelgrass Communities	$253.1	$253.1	$0.0	$0.0	$0.0	$253.1	Fund
96108	Assessing the Effects of EVOS on Mussels and Fish: Using	$84.0	$0.0				$0.0	Do not fund
96109-BAA	Decontamination and Restoration Process for Oil-Impacted	$551.8	$0.0				$0.0	Do not fund
96160	Assessment of Recovery from Surface Oiling, Subsurface	$129.7	$0.0				$0.0	Do not fund
96161	Differentiation and Interchange of Harlequin Duck	$230.4	$81.1	$78.9	$0.0	$0.0	$160.0	Fund
96290	Hydrocarbon Data Analysis, Interpretation, and Database	$119.8	$116.1	$121.0	$120.0	$470.0	$827.1	Fund
96427	Harlequin Duck Recovery Monitoring	$261.1	$261.1				$261.1	Fund

Summary of Trustee Council Action by Project: Research, Monitoring, General Restoration

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
Seabird/Forage Fish Ecosystem Project		$1,982.6	**$1,800.7**	**$1,750.7**	**$1,750.7**		**$5,302.1**	
96163	APEX: Apex Predator Ecosystem Experiment in Prince	$1,982.6	$1,800.7	$1,750.7	$1,750.7		$5,302.1	Fund
Seabird/Forage Fish -- Related Projects		$1,743.5	**$610.3**	**$145.5**	**$39.9**	**$0.0**	**$795.7**	
96021	Seasonal Movements and Pelagic Habitat Use by Common	$166.3	$0.0				$0.0	Do not fund
96031	Development of a Productivity Index to Monitor the	$254.6	$77.6	$50.0	$39.9	$0.0	$167.5	Fund
96038	Publication of Seabird Restoration Workshop	$31.0	$22.2	$0.0	$0.0	$0.0	$22.2	Fund
96101	Removal of Introduced Foxes From Islands	$88.9	$8.4	$0.0	$0.0	$0.0	$8.4	Fund
96120-BAA	Proximate Composition and Energetic Content of Selected	$40.9	$0.0				$0.0	Do not fund
96122	Mapping Potential Nesting Habitat of the Marbled Murrelet	$168.8	$0.0				$0.0	Do not fund
96142-BAA	Status and Ecology of Kittlitz's Murrelet in Prince William	$168.7	$168.7				$168.7	Fund
96143-BAA	Recovery of Bird and Mammal Populations in Prince	$321.2	$0.0				$0.0	Do not fund
96144	Common Murre Population Monitoring	$101.7	$70.5	$70.5			$141.0	Fund
96148	Kittlitz's Murrelet: Biology, Abundance, and Population	$99.8	$0.0				$0.0	Do not fund
96159	Surveys to Monitor Marine Bird Abundance In Prince	$262.9	$262.9	$25.0			$287.9	Fund
96175	Remote Video System Seabird Monitoring Project	$38.7	$0.0				$0.0	Do not fund
Subsistence Projects		$2,859.8	**$1,352.2**	**$1,226.0**	**$957.5**	**$1,594.8**	**$5,130.5**	
96009D	Survey of Octopuses in Intertidal Habitats	$142.3	$142.3	$40.9	$0.0	$0.0	$183.2	Fund
96052	Community Involvement & Use of Traditional Knowledge	$271.0	$271.0	$250.0	$250.0	$1,000.0	$1,771.0	Fund
96052B	Community Interaction/Traditional Knowledge	$298.3	$0.0				$0.0	See 96052A
96127	[redacted]tlek Coho Salmon Release	$52[redacted]	$26.6	$15.9	$15.9	$15.9	$74.3	Fund[redacted]

Summary of Trustee Council Action by Project: Research, Monitoring, General Restoration

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
96131	Chugach Native Region Clam Restoration	$405.6	$274.9	$413.6	$417.4	$417.4	$1,523.3	Fund
96202	Port Lions Community Hall	$150.0	$0.0				$0.0	Do not fund
96204	Kodiak Subsistence Resource Restoration Planning	$39.4	$0.0				$0.0	Do not fund
96205	Eyak Subsistence Recovery Camp Planning Project	$40.8	$0.0				$0.0	Do not fund
96206	Old Harbor Lagoon (Midway Culvert) Salmon Enhancement	$28.8	$0.0				$0.0	Do not fund
96207	Ocean Beach Sockeye Enhancement Feasibility Study	$92.7	$0.0				$0.0	Do not fund
96208	Kempff Bay Sockeye Enhancement Feasibility Study	$70.7	$0.0				$0.0	Do not fund
96210	Prince William Sound Youth Area Watch	$233.4	$115.0	$100.0	$100.0	$0.0	$315.0	Fund
96211	Community-Based Harbor Seal Biological Sampling Program	$44.0	$0.0				$0.0	See 96244
96212	PSP Screening: Restoration of Subsistence Shellfish	$167.7	$0.0				$0.0	Do not fund
96213	Alaska Native Harbor Seal Commission	$99.2	$0.0				$0.0	See 96244
96214	Documentary on Subsistence Harbor Seal Hunting in PWS	$77.4	$77.4	$0.0	$0.0	$0.0	$77.4	Fund
96218	Ouzinkie Clam Restoration Project		$0.0				$0.0	See 96131
96220	Eastern PWS Wildstock Salmon Habitat Restoration	$92.0	$92.0	$115.0	$12.0	$0.0	$219.0	Fund
96222	Chenega Bay Salmon Restoration -- Anderson Creek	$17.1	$16.1	$56.4	$0.0	$0.0	$72.5	Fund
96225	Port Graham Pink Salmon Subsistence Project	$95.3	$95.3	$83.1	$77.2	$161.5	$417.1	Fund
96226	Resurrection Bay Salmon Stock Enhancement	$45.0	$0.0				$0.0	Do not fund
96244	Community-Based Harbor Seal Management and Biological	$128.5	$128.5	$100.0	$85.0	$0.0	$313.5	Fund
96256	Columbia and Solf Lakes Sockeye Salmon Stocking	$60.8	$60.8				$60.8	Fund
96257	Solf Lake Sockeye Salmon Stocking	$34.3	$0.0				$0.0	See 96256
96272	Chenega Chinook Release Program	$52.3	$52.3	$51.1	$0.0	$0.0	$103.4	Fund
96279	Resource Abnormalities Study	$71.7	$0.0				$0.0	Do not fund
96428	Subsistence Restoration Planning and Implementation	$48.8	$0.0				$0.0	Do not fund

Summary of Trustee Council Action by Project: Research, Monitoring, General Restoration

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
Archaeological Resources		**$3,819.2**	**$504.2**	**$195.0**	**$195.0**	**$135.0**	**$1,029.2**	
96007A	Archaeological Index Site Monitoring	$146.5	$145.1	$135.0	$145.0	$135.0	$560.1	Fund
96007B	Site Specific Archaeological Restoration	$78.4	$78.4	$0.0	$0.0	$0.0	$78.4	Fund
96149	Archaeological Site Stewardship	$74.4	$74.4	$60.0	$50.0	$0.0	$184.4	Fund
96150	Expansion of Alutiiq Archaeological Repository	$535.0	$0.0				$0.0	Do not fund
96152	Community Museum, Repository, Archaeological, Site	$190.3	$0.0				$0.0	Do not fund
96153	Community Cultural Centers, Repositories and Subsistence	$2,588.3	$0.0				$0.0	Do not fund
96154	Comprehensive Community Plan for Restoration of	$206.3	$206.3				$206.3	Fund
96219	Ouzinkie Archeological Culture Center		$0.0				$0.0	Do not fund
Reducing Marine Pollution		$164.6	**$28.3**				**$28.3**	
96091	Monitoring for Current and Potential Environmental Impacts	$135.0	$0.0				$0.0	Do not fund
96115	Sound Waste Management Plan	$29.6	$28.3				$28.3	Fund
Habitat Improvements		$1,077.1	**$560.6**	**$800.0**	**$600.0**	**$0.0**	**$1,960.6**	
96058	Landowner Assistance Project	$205.9	$0.0				$0.0	Do not fund
96141	Afognak Island State Park - Habitat Restoration Survey	$45.0	$0.0				$0.0	Do not fund
96176	Restoration of Essential Wetland Habitat at San Juan Bay on	$67.5	$0.0				$0.0	Do not fund
96178	Second Growth Forest Habitat Enhancement for Injured	$84.3	$0.0				$0.0	Do not fund
96180	Kenai Habitat Restoration & Recreation Enhancement Project	$674.4	$560.6	$800.0	$600.0	$0.0	$1,960.6	Fund

Proj. No.	Title	FY 96 Request	Amount Approved FY 96	Future Year Cost Estimates FY97	FY 98	FY 99 to End	Total FY 96 to End	Trustee Council Action
Information Support								
		$42.0	**$42.0**	**$0.0**	**$0.0**	**$0.0**	**$42.0**	
96155	Prince William Sound Information Service		$0.0				$0.0	Do not fund
96507	EVOS Symposium Publication	$42.0	$42.0	$0.0	$0.0	$0.0	$42.0	Fund
Research Facilities								
		$3,000.0	**$0.0**				**$0.0**	
96151	Expansion of the Prince William Sound Science Center/Oil	$3,000.0	$0.0				$0.0	Do not fund
Total:		**$35,695.3**	**$18,204.8**	**$9,548.9**	**$7,276.5**	**$2,838.6**	**$37,868.8**	

Exxon Valdez Oil Spill Trustee Council

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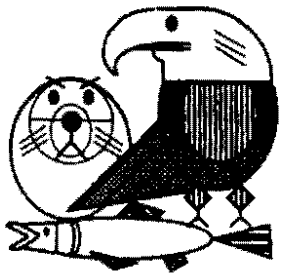

MEMORANDUM

To: Catherine Berg, Dave Duffy, Dave Irons, Dave Roseneau, Bob Spies, Bruce Wright

From: Stan Senner

Date: December 18, 1995

Subj: Processing EVOS bird carcasses at Burke Museum

I have been slow to respond to a query from Sievert Rohwer at the Burke Museum, University of Washington, about funds to complete the preparation of EVOS bird carcasses. You may recall that the National Science Foundation provided emergency funds to salvage a sample of these carcasses. The NSF funds were insufficient to do the job, and the museum is now in the position of either destroying the remaining carcasses or finding additional funds.

A copy of Sievert Rohwer's letter is enclosed. Note especially his table (p. 2) showing the remaining carcasses and processing costs.

I have discussed this with Molly McCammon. We do not have on hand discretionary funds that can easily be used for this kind of work, and I suspect it is too soon in FY 1996 to know whether any on-going projects have funds to spare. Here is a recommendation:

We could suggest that the Burke Museum go ahead and incinerate most of the remaining carcasses, except for the common murres, pigeon guillemots, and perhaps the black-legged kittiwakes. If the museum can continue to keep these frozen for a few more months, we could encourage them to submit a small proposal (< $15K) for consideration as part of the FY 1997 work plan. We cannot guarantee funding, but a very small proposal to finish this work would have a reasonable chance of approval.

What do you think? Are these carcasses valuable to EVOS restoration? What about the species that I suggested?

Please let me know your opinion quickly (by noon Wednesday). I have promised to give them some kind of reply before Christmas. Thank you.

Enclosure (1)

Sievert A. Rohwer
Associate Director

(206) 543-4066
FAX: (206) 685-3039
e-mail: rohwer@u.washington.edu
Burke Museum

Friday, November 3, 1995

Ms. Molly McCammon
EVOS Trustee Council
645 G Street
Suite 401
Anchorage, AK 99501

Dear Ms. McCammon:

Dr. Kenneth Warheit spoke briefly with me about the results of the EVOS Trustees / Pacific Seabird Group Seabird Restoration Workshop in Anchorage this past month, and emphasized that there was considerable interest in the status and disposition of the seabird carcasses recovered from the Exxon Valdez oil spill. As you may know, the University of Washington received emergency funding from the National Science Foundation to salvage bird carcasses from the Exxon Valdez oil spill, and the Burke Museum lead a multi-institutional effort to sort out samples of these carcasses that would be of research value, prior to their incineration in the Fall of 1992. Roughly 2,100 bird carcasses were salvaged, of which 1,500 were brought to the Burke Museum. The initial funding was limited to the salvage activities, and did not include money to process and curate the specimens. Subsequently, the National Science Foundation and the University of Washington have provided additional funding to support the preparation, curation and storage of a considerable fraction of these carcasses. To date we have cleaned and preserved as combination specimens (extended wing, and pelted skin or full skeleton) over 700 of these carcasses, and discarded some 400 whose condition, difficult to assess in the field, rendered them of limited use. Of the carcasses that we brought to Seattle, all of the Yellow-billed, Common, and Pacific Loons, Red-necked Grebes, Double-crested, Red-faced, and Pelagic Cormorants, Harlequin Ducks and Bald Eagles, and all of the alcids, except Common and Thick-billed Murres, Pigeon Guillemots, and puffins, have now been prepared.

Unfortunately, our funding for this part of the project was not sufficient to complete the preparation of all of these specimens. Thus I must now either find additional resources to complete the preparation of these specimens, or destroy them. I recognized the importance of preserving the EVOS specimens early on (and obtained significant funding for doing so), and I appreciate the importance, reiterated by Ken Warheit after the Anchorage workshop, of continuing this effort. But my responsibility as Curator of Birds is to the collection itself, and to the research the collection promotes. I simply have no more financial resources to devote to this project.

Because of his interests in restoration, Ken Warheit has volunteered to do whatever he can to insure that the remaining, unprepared specimens salvaged from this spill are processed and, thus, made available for study by scientists and other qualified users. He suggested that I

write to the Exxon Valdez Trustees and request funding to prepare the remaining specimens. As you will see from the enclosed budget, the costs range from $4,500 to $26,000 depending on what is completed. Our top priority would be to process the Common Murres because Ken feels that they could make significant contributions to ongoing studies. I understand that the timing of this request is not within the "normal" period for EVOS proposals. However, before my discussions with Ken Warheit, I simply assumed that there was no funding available from any source to process the remaining specimens. As a result, we have scheduled these specimens for incineration in December. I also realize that the Trustee Council must received dozens of these "emergency" grant requests each year, all as "urgent" as this requests. However, much of the baseline information concerning injury, and therefore, much of the basis for EVOS seabird restoration may reside with these specimens. Ken feels that they are of fundamental importance to the continuing efforts to evaluate the consequences of the spill, and does not want to see them destroyed. The Burke Museum would be happy to oblige, providing that we receive additional assistance to help finish what we started.

Please consider this letter as a request for funding. If you have questions, you may contact me at the above address, by telephone, or by e-mail . Thanks for you interest.

Sincerely,

Sievert Rohwer
Curator of Birds
Professor of Zoology

cc. Stan Senner
Kenneth Warheit

Proposed budget for finishing salvaged EVOS specimens.

species	total	# to prepare	preparation hours	salary, benefits	Indirect Costs
Common Murre	**$4,532**	68	204	$3,052	$1,480
Thick-billed Murre	**$666**	10	30	$449	$218
Pigeon Guillemot	**$3,866**	58	174	$2,603	$1,262
Tufted Puffin	**$2,333**	35	105	$1,571	$762
Black-legged Kittiwake	**$3,732**	56	168	$2,513	$1,219
Northern Fulmar	**$3,799**	57	171	$2,558	$1,241
Fork-tailed Storm-Petrel	**$1,733**	26	78	$1,167	$566
various ducks	**$3,999**	60	180	$2,693	$1,306
Horned Grebe	**$1,666**	25	75	$1,122	$544
total	**$26,325**	**395**	**1185**	$17,728	$8,598

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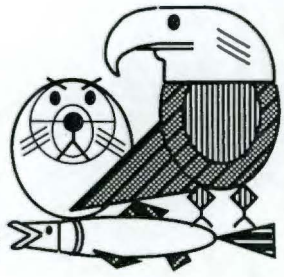

FAX COVER SHEET

To: _____ Number: _____

From: Stan Senner Date: Dec 18, 1995

Comments: Total Pages: 4

Catherine Berg
Dave Duffy 276-6847
Dave Gibbons 786-3641
Dave Rosenau 907-235-7783
Bob Spies
Bruce Wright

FAX COMPLETE

Document Sent By: Kathi

2/15/95

Exxon Valdez Oil Spill Trustee Council
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MEMORANDUM

To: **Restoration Work Force and Liaisons**

From: **Stan Senner, Science Coordinator**

Date: **December 15, 1995**

Subj: **Abstracts for 1996 Restoration Workshop**

Attached is a list of projects for which abstracts have not been received for distribution to participants in the Restoration Workshop. Any help you can provide in encouraging submission of these remaining abstracts would be much appreciated. Please let me know if any of these projects are listed in error.

Several of these projects were closed out in FY 1995 (e.g., 039, 102, 137), so the only work done was report writing. However, it is still a good opportunity to remind others of what was learned in these projects, and submission of an abstract is encouraged but not mandatory.

I will circulate a revised agenda for the Restoration Workshop and additional reminders about pre-registrations and room reservations next week.

Thank you.

enclosure (1)

FY 1995 Projects for which
Restoration Office has not received an abstract
as of 15 December 1995

007A Archaeological Site Restoration - Index Site Monitoring (ADNR)
026 Hydrocarbon Monitoring: Integration of Microbial and Chemical Sediment Data (ADEC)
027 Kodiak Shoreline Assessment: Monitoring Surface and Subsurface Oil (ADEC)
029 Population Survey of Bald Eagles in PWS (DOI)
038 Symposium on Seabird Restoration (DOI)
039 Closeout (?): Common Murre Productivity Monitoring (DOI)
060 Spruce Bark Beetle Impacts (ADFG)
102 Closeout: Murrelet Prey and Foraging Habitat in PWS (DOI)
106 Subtidal Monitoring: Eelgrass Communities (ADFG)
117 BAA: Harbor Seals and EVOS: Blubber and Lipids as Indices of Food Limitation (NOAA)
121 Fatty Acid Signatures of Selected Forage Fish Species in PWS (NOAA)
137 Closeout: PWS Salmon Stock Identification and Monitoring Studies (ADFG)
163A Abundance and Distribution of Forage Fish (NOAA)
163D Distribution of Forage Fish as Indicated by Puffin Diet Sampling (DOI)
163L Historical Review of Ecosystem Structure in the PWS/GOA Complex (DOI)
166 Herring Natal Habitats (ADFG)
272 Chenega Chinook Release (ADFG)
320A Salmon Growth and Mortality (ADFG)
320E Juvenile Salmon and Herring Integration (ADFG)
320G Phytoplankton and Nutrients (ADFG)
320K PWSAC: Experimental Fry Release (ADFG)
320Q Avian Predation on Herring Spawn
320T Juvenile Herring Growth and Habitat Partitioning (ADFG)

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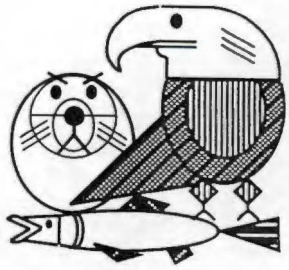

FAX COVER SHEET

To: Restoration Work Force

From: Stan Senner Date: December 15, 1995

Comments: Total Pages: 3

Please distribute to RWF members ASAP. Thanks

FAX COMPLETE

RESTORATION WORK FORCE MEMBERS INCLUDE:

Belt, Gina
Berg, Catherine
Fries, Carol
Gibbons, Dave
Joe Sullivan/Bill Hauser
Bartels, Leslie/Lisa Thomas
Miraglia, Rita
Morris, Byron
Piper, Ernie
Rice, Bud
Spies, Bob
Thompson, Ray
Wright, Bruce

Document Sent By: Kgri

8/17/95

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*** MULTI TRANSACTION REPORT ***
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INCOMPLETE TX/RX

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	[15] 2698918	CAROL FRIES
	[16] 2672450	RITA MIRAGLIA
	[17] 2713992	R.THOMPSON
	[18] 2672474	J.SULLIVAN
	[19] 7863636	L.BARTELS
	[20] 7863350	C.BERG
	[21] 2572517	B.RICE
	[24] 2697652	E.PIPER
	[35] 15103737834	B.SPIES
	[38] 2715827	G.BELT

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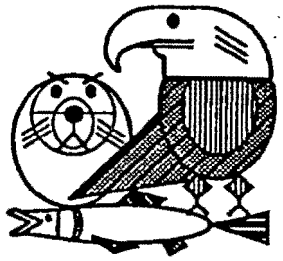

December 15, 1995

Ms. Gail Evanoff
PO Box 8060
Chenega Bay, Alaska 99574

Dear Gail:

Attached is a rough draft of the workshop report. It is not 100% complete. Some editing is needed, and Appendix F is incomplete. (Appendix F includes the maps and spreadsheet that we used for the meeting in Chenega).

Please look at it and suggest whatever changes you believe are necessary. I will be out of town December 18th through January 15th. I will revise it when I get back. In the mean time, Dianne will be working on Appendix F and gathering additional information for Trustee Council use. The information will also be useful should we need to issue an RFP or write an EA. That way, we can hit the ground running, if and when the Trustee Council authorizes work to proceed.

I believe it would be a good idea for you to touch base with Molly McCammon when you are in Anchorage. When you come to town, please call her in advance to schedule a time.

Merry Christmas. See you in January.

Sincerely,

Bob Loeffler
Director of Planning

cc: Ernie Piper
Diane Munson
Chuck Totemoff

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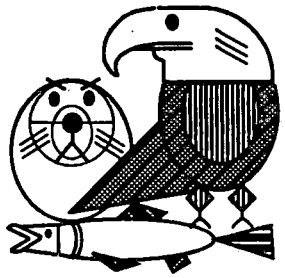

MEMORANDUM

TO: Molly McCammon, Executive Director

FROM: Eric F. Myers, Director of Operations

DATE: 12/14/95

SUBJ: Air-Water 1 — Project Termination

The purpose of this memorandum is to document for the files that no final report will be prepared for A/W 1.

This project has been discontinued for a combination of reasons. First, the person working on the final A/W 1 report has resigned. The major part of the report was to consist of digitized maps based of the oil spill trajectory over time, based on the recorded field observations. At this point there is no one likely to be capable of completing the report. Second, technical questions have been raised regarding the level of accuracy that could be expected of digitized maps based on hand drawn notes from the original overflight charts.

As indicated in the attached memorandum from Diane Munson/DEC to Ernie Piper/DEC, the raw data regarding the aerial oiling observations (i.e., the "hard copy" overflight charts and notes) remain available to persons seeking information regarding the progress of the spill trajectory over time. Thirty three boxes containing the original DEC and NOAA overflight charts have been transferred to the Alaska Archives.

Future references to A/W 1 in the Quarterly Project Status Summary should indicate: "Project terminated. DEC/NOAA overflight charts stored in Alaska Archives."

cc: Ernie Piper
Sandra Schubert
Carrie Holba
Carol Fries

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

TONY KNOWLES, GOVERNOR

M E M O R A N D U M

DATE: December 14, 1995

TO: Ernest Piper

FROM: Dianne Munson DM

RE: Air Water One Data (ADEC overflight charts)

CC: David Bruce, Eric Meyers

For your information, thirty three boxes containing ADEC and NOAA overflight charts from the first two years of the *Exxon Valdez* Oil Spill Response have been transferred to Alaska Archives. These charts were being used for the Air Water One project which has been terminated.

Exxon Valdez Oil Spill Trustee Council
Restoration Office
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Phone: (907) 278-8012 Fax: (907) 276-7178

December 14, 1995

Dr. Daniel Pauly
Fisheries Centre
University of British Columbia
2204, Main Mall
Vancouver V6G 1K5
British Columbia
CANADA

Dear Dr. Pauly:

Last spring you submitted a proposal entitled "A Mass-Balance Model for Trophic Fluxes In Prince William Sound" to the *Exxon Valdez* Oil Spill Trustee Council. Your project was not recommended for funding in FY 1996, in part because it seemed appropriate to defer synthesis efforts of this type until more data are available. However, we continue to be very interested in efforts to integrate and synthesize data generated through the restoration program and believe that we approaching the time when we should actively encourage this type of work.

Early in November we received a letter from Dr. Pete Peterson reminding us that one way to encourage synthesis work in the future would be to invite you to participate in the Trustee Council's annual Restoration Workshop, which will be held January 16-18, 1996 in Anchorage. Although the program is largely set for this meeting, and we would not be able to offer you formal time on the agenda, we would be delighted if you could attend the workshop. To that end, we would be willing to pay your airfare and hotel expenses. Some meals will be provided as part of the workshop, and we would ask that you pick up any additional meal and incidental expenses.

I have enclosed a draft workshop agenda. One of our main goals is to encourage interdisciplinary exchanges among investigators, and I think your participation would be an excellent introduction to the investigators and the types of data being generated.

I know that time is somewhat short, but I do hope you can fit this into your schedule. Please let me know by telephone, fax, or e-mail (stans@evro.usa.com) if you would like to attend, and we will then proceed to make the necessary arrangements. Thank you.

Sincerely,

Stanley E. Senner
Science Coordinator

SS/kh
cc: Pete Peterson
Robert Spies
Molly McCammon

DRAFT

[12/06/95 draft]

1996 RESTORATION WORKSHOP
January 16-18, 1995
Captain Cook Hotel, Anchorage

Day 1 - Tuesday (16th)

8:00 am	Registration
9:00	*Introduction & Annual Report on EVOS Program* Molly McCammon
9:45	*Traditional Ecological Knowledge and Science: Successful Examples* Larry Merculieff (2nd speaker, from science perspective, to be determined)
10:30	Break
11:00	*Traditional Ecological Knowledge and Science: the EVOS Restoration Program* (3-4 speakers/panel members to be determined)
12:00 pm	Buffet Lunch (in hotel)
1:15	*Integrating EVOS Science: Ecosystem Linkages* Robert Spies
2:00	*Subsistence and Archaeology* Session Chair: Martha Vlasoff
3:00	Break
3:30	*Environmental Characterization and Lower Trophic Levels* Session Chair: Ted Cooney
5:30-7:00	Reception and Poster Session (in hotel)

Day 2 - Wednesday (17th)

8:00 am	*Higher Trophic Levels - Forage Fish, Salmon, and Herring* Session Chair: Alex Wertheimer
9:45	Break
10:15	*Higher Trophic Levels - Mammals* Session Chair: Kathy Frost
11:15	*Higher Trophic Levels - Birds* Session Chair: David Duffy
12:00 pm	Buffet Lunch (in hotel)
1:00	*Birds* [continued]
2:00	*Ecosystem Structure and Functions* Session Chair: Don Schell
3:00	Break
3:30	*Disease, Ecotoxicology and Oiling* Session Chair: Stanley Rice

Day 3 - Thursday (18th)

8:00 am	*Fisheries Management, Stock Identification, and Resource Supplementation* Session Chair: Mark Willette
9:30	*Information, Science Management, and Administration* Molly McCammon
10:00	Break
10:30	*Updating the Injured Species List and Recovery Objectives* (Concurrent Sessions with PIs and others providing suggestions)
12:00 pm	Lunch (on your own)
1:30	*Alaska Sealife Center and EVOS Science* Mike Castellini
2:00	*Reactions from Peer Reviewers* ("Core" peer reviewers in a panel format)
3:00	*Closing Remarks* Molly McCammon
3:15	Adjourn

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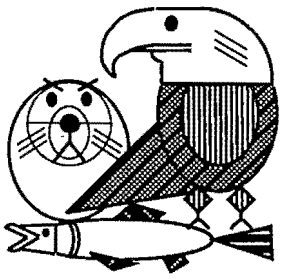

FAX COVER SHEET

To: DR. PAULY Number: 604-822-8934

From: S. SENNER Date: DEC. 14, 1995

Comments: Total Pages: 1e

HARD COPY TO FOLLOW IN MAIL

Document Sent By: KERI HILE

2/15/95

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*** ACTIVITY REPORT ***
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Phone: (907) 278-8012 Fax: (907) 276-7178

Status Report: Habitat Protection and Acquisition Program

prepared by
Molly McCammon, Executive Director
***Exxon Valdez* Oil Spill Trustee Council**
December 13, 1995

Background

In November 1994, following completion of an extensive planning and public involvement process that included a full EIS under NEPA, the Trustee Council adopted a formal *Restoration Plan* to guide restoration of the biological resources and associated human services injured by the *Exxon Valdez* oil spill. As a result of both widespread public support and scientific peer review, the *Restoration Plan* specifically established Habitat Protection and Acquisition as "one of the principal tools of restoration... important in ensuring continued recovery in the spill area."[1]

The Trustee Council has completed an analysis of large parcels(> 1,000 acres) and small parcels (< 1,000 acres) with high value habitats important to the recovery and restoration of injured resources and services.[2] As indicated in the table showing Past and Estimated Future Uses of the Civil Settlement Fund, the Trustee Council anticipates that approximately $375 million of the settlement will be needed to implement the *Restoration Plan* Habitat Protection and Acquisition Program. **Attachment 1**.

This Status Report provides an update of recent and on-going activities to implement the *Restoration Plan* Habitat Protection and Acquisition Program and serves as a supplement to the *Report of the Executive Director Concerning Habitat Acquisition* (October 1995). In the past two months, the Trustee Council has taken action on a number of elements of the Habitat Protection and Acquisition Program.

Large Parcel Program

Past Actions. During the four years since the civil settlement, the Trustee Council has committed $175 million towards the protection in perpetuity of more than 205,000 acres of valuable habitat. In addition, Council action has resulted in 56,000 acres of high value lands being placed into a 7-year conservation easement.

Current Activities. Current efforts to implement the large parcel habitat protection program include working to secure protection agreements with seven major land

owners in the spill area including three in Prince William Sound (Chenega, Tatitlek, and Eyak Corporations); two on the Kenai Peninsula (Port Graham and English Bay Corporations); one in the Shuyak/Afognak region (Afognak Joint Venture); and one on Kodiak Island (Koniag Corporation). These acquisitions would total more than 330,000 acres.

Koniag. Koniag Phase I was signed in early November. The corporation has indicated they are anxious to begin negotiations on Phase II as soon as possible for long-term protection of the Karluk and Sturgeon Rivers, which are currently protected by a seven-year conservation easement under Phase I. The Karluk River (KON 04) is one of 13 high value parcels that have not yet been acquired.

Shuyak. Agreement was reached with the Kodiak Island Borough at the Council's November 20, 1995 meeting to purchase lands on Shuyak Island for a price of $42 million. A more detailed resolution and purchase agreement were approved by the Trustee Council on December 11, 1995.

Chenega. Additional field work was completed in October by a U.S. Forest Service contractor as part of a reassessment of the original timber appraisal. The contractor's preliminary analysis of that work is currently being reviewed by the U.S. Forest Service to determine if a final appraisal can be completed without further field work. The Chenega IRA Council recently passed a resolution opposing any land transactions. Jack Pot Bay (CHE 02) and Eshamy Bay (CHE 01) are high value parcels that are under negotiation for protection along with other Chenega lands.

Tatitlek. The expected date for the preliminary draft of the timber appraisal is late December. Tatitlek is very anxious to have the appraisal completed and begin negotiations. We are doing everything possible to expedite the process. Tatitlek will be given timber cruise data as it is developed. A Trustee Council meeting is tentatively scheduled for January 30, 1996 for possible action on this acquisition. Two Moon Bay (TAT 07) and Bligh Island (TAT 01) are high value parcels that are under negotiation along with other Tatitlek lands.

Eyak. We are still trying to set up an informal meeting with several board members. Although we have not yet been able to find a date that works for everyone, we are continuing to pursue this. In addition, a letter is being drafted to the Eyak Board expressing interest in continued discussions, and suggesting a possible meeting with the board in January. The Forest Service is reviewing the timber cruise data presently in hand and will develop a schedule for finalizing that appraisal. Sheep Bay (EYA 02), Windy Bay/Deep Bay (EYA 03), and Port Gravina (EYA 01) are all high value parcels under negotiation for protection.

Afognak Joint Venture. The Alaska Department of Natural Resources will be issuing an RFP for this appraisal in January, 1996. Work will be scheduled to commence as

early as possible in the spring. Pauls/Laura Lake (AJV 03) and Shuyak Straight (AJV 01) are high value parcels that the Trustee Council has identified as important for protection.

Kenai Fjords. Informal discussions continue, but no formal action is expected until action on Tatitlek and Chenega acquisitions. James Lagoon (ENB 06) and Delight/Desire Creeks (PTG 05) are high value parcels within the Kenai Fjords area.

Small Parcel Program

To this point, the Council has identified 32 small parcels as having especially valuable restoration benefits. The Council acted on the first package of small parcels at both the November 20 and December 11, 1995 meetings, authorizing the appropriate agencies to make offers at appraised value for 22 small parcels, including approval of a Trustee Council contribution of $4 million to a Kenai Natives Association package. **Attachment 2.** If all are accepted, these acquisitions would ensure the protection of 17,645 acres throughout the oil spill area for a cost of $15.6 million. Thus far, six landowners have indicated they are willing to sell their parcels at appraised value, two others are likely, and the remainder are in various stages of discussion. Appraisals for the remaining 10 parcels under consideration are either under review or are still being completed.

Summary

During development of the *Restoration Plan*, the Habitat Protection and Acquisition Program received enormous public comment and support. This *Restoration Plan* element continues to be the subject of intense public interest. We are moving aggressively to complete the Habitat Acquisition and Protection part of the Restoration Program as expeditiously as possible. It is a priority to attempt to reach agreements this winter and spring with landowners in Prince William Sound. Thus far, the purchase of 2,000 acres of timber rights near Cordova has been the only large-parcel habitat protected in Prince William Sound. In addition, much progress still needs to be made in order to protect those parcels evaluated early in the process as having high or moderate habitat values for injured resources. **Attachment 3.**

1. *Exxon Valdez* Oil Spill Restoration Plan (November 1994), p. 22.

2. Comprehensive Habitat Protection Process: Large Parcel Evaluation and Ranking—Volumes I and II; and Comprehensive Habitat Protection Process: Small Parcel Evaluation and Ranking—Volume III.

Attachment 1	Past and Estimated Future Uses of the Civil Settlement Fund
Attachment 2	Status of Small Parcel Program
Attachment 3	Status of High/Moderate Large Parcels

ATTACHMENT 1

Past and Estimated Future Uses of the Civil Settlement Fund

as of December 1995

(Figures in thousand dollars.)

Damage Assessment (incl. litigation & cleanup)		**$ 214 Million**
(1) Reimbursements to govts:	$ 173.7 million	
(2) Reimbursements to Exxon:	$ 39.9 million	
Habitat Protection		**$ 375 Million**
Large- & Small-parcel Acquisitions: (including past and anticipated future purchases, and support costs)		
Restoration Reserve		**$ 108 Million** (plus interest)
FY 94 & FY 95:	$ 24.0 million	
FY 96:	$ 12.0 million	
Anticipated future:	$ 72.0 million	
Public Information, Science Mgmt, & Administrati		**$ 35 Million**
Past Authorizations:	$ 21.8 million	
FY 92	$ 5.1	
(3) FY 93	$ 4.1	
FY 94	$ 4.9	
FY 95	$ 4.3	
FY 96	$ 3.4	
Estimated Future:	$ 13.2 million	
Research, Monitoring, and General Restoration		**$ 180 Million**
Past Expenditures:	$ 105.7 million	
FY 92	$ 14.1	
(3) FY 93	$ 11.2	
FY 94	$ 18.0	
FY 95	$ 19.2	
FY 96	$ 18.2	
Alaska SeaLife Ct	$ 25.0	
Estimated Future:	$ 74.7 million	
Total		**$ 912 Million**
Exxon Payments	$ 900.0 million	
Accumulated Interest less court fees	$ 12.0 million	

DRAFT

Notes for the table.

(1) Reimbursements to governments is reduced by 2.7 million because that amount of the reimbursement to the state government was for the FY 92 work plan.

(2) Deduction by Exxon Corporation for cleanup activities after January 1, 1992.

(3) FY 93 was a seven-month fiscal year to transition from the oil spill year to the federal fiscal year.

ATTACHMENT 2

Exxon Valdez Oil Spill Trustee Council
Habitat Protection Program — Small Parcel Acquisitions

December 11, 1995

Parcel ID	Description	Acres	Rank	Value
Offer to Purchase at Appraised Value		**2,553.8**		**$11,555,500**
Prince William Sound Parcels				
PWS 17	Ellamar Subdivision Block 10 Lots 5-11 & 30	22.0	Moderate	$310,000
PWS 17A-D	Ellamar Subdivision Block 10, Lots 1-3 & 12 & USMS 556A	11.4	Moderate	$345,500
PWS 52	Hayward Parcel (Zook)	9.5	Moderate	$150,000
Kenai River Parcels				
KEN 10	Kobylarz Subdivision	20.0	Moderate	$320,000
KEN 34	Cone Parcel	100.0	High	$600,000
KEN 54	Salamatof Parcel	1,377.0	Moderate	$2,320,000
KEN 148	River Ranch	146.0	Moderate	$1,650,000
KEN 1006	Girves Parcel	110.0	PMSC	$1,835,000
Other Kenai Peninsula Parcels				
KEN 12	Baycrest	90.0	PMSC	$450,000
KEN 19	Coal Creek Moorage	53.0	High	$260,000
KEN 29	Tulin Parcel	220.0	PMSC	$1,200,000
KEN 55	Overlook Park	97.0	Moderate	$244,000
KEN 1001	Deep Creek	91.0	High	$672,000
KEN 1005	Ninilchik	16.0	PMSC	$50,000
KEN 1009	Cooper Parcel	30.0	PMSC	$48,000
KEN 1014	Grouse Lake	64.0	PMSC	$211,000
KEN 1015	Lowell Point	19.4	PMSC	$531,000
Kodiak Island				
KAP 220	Mouth of Ayakulik River	56.0	PMSC	$213,000
KAP 226	Karluk River Lagoon	21.5	Moderate	$146,000
Kenai Natives Association Package		**15,091.0**		**$4,000,000**
Trustee Council contribution. $6.9 million from other sources.				
KEN 1004	Stephanka Tract	803.0	High	
KEN 1002/03	*Moose River*	*1,996.0*	*Low*	
	Swanson River Rd West	*10,172.0*	*Low*	
	Beaver Creek	*2,120.0*	*Low*	
Defer Action		**2,632.4**		
PWS 05	Valdez Duck Flats	33.0	High	Reconfigured; use federal restitution fund
PWS 11	Horseshoe Bay	315.0	PMSC	Needs new appraisal
PWS 1010	Jack Bay	942.0	PMSC	Needs new appraisal
PWS 1027	Fleming Spit	5.4	PMSC	Further review of restoration benefits
KEN 149	Perl Island	156.0	High	Needs new appraisal
KAP 22	The Triplets	60.0	PMSC	Appraisal not finalized
KAP 105/142	Three Saints Bay	88.0	PMSC	Appraisal not finalized
KAP 145	Termination Point	1,028.0	Moderate	Needs title cleared and timber appraisal
KAP 150	Karluk	5.0	Moderate	Appraisal not complete

ATTACHMENT 3

12/13/95 DRAFT

Habitat Protection and Acquisition Program
Status of High/Moderate Large Parcels

PARCEL	PARCEL NAME	REGION	RANK	LANDOWNER	ACREAGE	STATUS
AJV 03	Pauls/Laura Lake	KOD	High	Afognak Joint Venture	13,400	appraisal work needed
EYA 02	Sheep Bay	PWS	High	Eyak	9,100	under negotiation
CHE 02	Jackpot Bay	PWS	High	Chenega	12,100	under negotiation
TAT 07	Two Moon Bay	PWS	High	Tatitlek	32,500	under negotiation
TAT 01	Bligh Island	PWS	High	Tatitlek	8,800	under negotiation
AKI 06	North Olga Bay	KOD	High	Akhiok Kaguyak	16,900	protected (fee)
CHE 01	Eshamy Bay	PWS	High	Chenega	7,900	under negotiation
AJV 01	Shuyak Straight	KOD	High	Afognak Joint Venture	27,100	appraisal work needed
AKI 04	Aliulik Peninsula	KOD	High	Akhiok Kaguyak	34,300	protected (fee)
CAC 07	Patton Bay	PWS	High	Chugach Alaska	13,800	not available from landowner
EYA 03	Windy Bay/Deep Bay	PWS	High	Eyak	7,100	under negotiation
KIB 01	Shuyak Island	KOD	High	Kodiak Island Borough	27,900	protected (fee)
AKI 08	Upper Station Lakes	KOD	High	Akhiok Kaguyak	15,600	protected (easement)
KON 01	Brown's Lagoon	KOD	High	Koniag	9,900	protected (fee - majority)
KON 04	Karluk River	KOD	High	Koniag	28,200	protected (7 yr. easement)
ENB 06	James Lagoon	KEN	High	English Bay	3,800	under negotiation
EYA 01	Port Gravina	PWS	High	Eyak	3,400	under negotiation
KON 02	Uyak Bay	KOD	High	Koniag	7,000	protected (fee - fraction only)
PTG 05	Delight/Desire Creeks	KEN	High	Port Graham	11,500	under negotiation
TAT 02	Sawmill Bay	PWS	Moderate	Tatitlek	3,200	under negotiation
AKI 05	Sulua/Portage Bays	KOD	Moderate	Akhiok Kaguyak	8,200	protected (fee)
AJV 04	Paramanof Peninsula	KOD	Moderate	Afognak Joint Venture	56,700	appraisal work needed
ENB 02	Harris Peninsula	KEN	Moderate	English Bay	6,200	under negotiation
PTG 01	Upper Aialik	KEN	Moderate	Port Graham	4,300	under negotiation
AJV 06	Malina Peninsula	KOD	Moderate	Afognak Joint Venture	27,300	appraisal work needed
AKI 01	Kaiugnak Bay	KOD	Moderate	Akhiok Kaguyak	4,900	protected (fee)
CHE 09	Northwest Evans Island	PWS	Moderate	Chenega	6,200	under negotiation

12/13/95 DRAFT

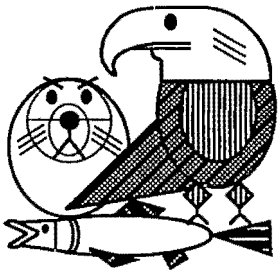
PARCEL	PARCEL NAME	REGION	RANK	LANDOWNER	ACREAGE	STATUS
ENB 08	Port Chatham	KEN	Moderate	English Bay	15,700	under negotiation
PTG 02	Northwest Lagoon/Cup Cove	KEN	Moderate	Port Graham	3,500	under negotiation
PTG 11	Chugach Island	KEN	Moderate	Port Graham	3,300	under negotiation
AKI 09	Sukhoi/Kempff Bays	KOD	Moderate	Akhiok Kaguyak	15,900	not available from landowner
CAC 02	Bay of Isles	PWS	Moderate	Chugach Alaska	10,800	not available from landowner
CAC 05	Nuchek Island	PWS	Moderate	Chugach Alaska	800	not available from landowner
EYA 11	Core Lands (EYA 08, 09, 10)	PWS	Moderate	Eyak	13,700	under negotiation
KON 03	Larsen Bay	KOD	Moderate	Koniag	22,400	protected (fee - majority)
KON 05	Halibut Bay	KOD	Moderate	Koniag	21,900	protected (fee)
AJV 05	Inner Malina Bay	KOD	Moderate	Afognak Joint Venture	12,700	appraisal work needed
PTG 07	Shelter Cove/Yalik Bay	KEN	Moderate	Port Graham	10,500	under negotiation
CHE 04	Northwest Chenega Bay	PWS	Moderate	Chenega	7,300	under negotiation
OLD 05	Three Saints Bay	KOD	Moderate	Old Harbor	5,300	protected (fee)
TAT 03	Columbia Bay	PWS	Moderate	Tatitlek	13,500	under negotiation
KON 06	Sturgeon River	KOD	Moderate	Koniag	22,400	protected (7 yr. easement)
TAT 04	Galena Bay	PWS	Moderate	Tatitlek	13,200	under negotiation
TAT 05	Landlocked Bay	PWS	Moderate	Tatitlek	7,400	under negotiation
OLD 04	Barling Bay	KOD	Moderate	Old Harbor	4,600	protected (fee)
CHE 03	Granite/Ewan/Paddy Bays	PWS	Moderate	Chenega	15,000	under negotiation
OLD 01	Kiliuda Bay	KOD	Moderate	Old Harbor	9,500	protected (fee)

NOTES:

protected (fee)	= Trustee Council has agreement for fee purchase
protected (easement)	= Trustee Council has agreement for purchase of conservation easement
protected (7 yr. easement)	= Trustee Council has agreement for purchase of 7 year conservation easement
protected (fee - majority)	= Trustee Council has agreement for fee purchase of majority of parcel
protected (fee - fraction only)	= Trustee Council has agreement for fee purchase of fraction of parcel
under negotiation	= negotiations on-going with landowner
appraisal work needed	= further timber cruise/appriasal work needed
not available from landowner	= landowner has not indicated willingness to sell at this time

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



News Release - For Immediate Release

Date: December 13, 1995 95-30
Contact: Molly McCammon or L.J. Evans at 907/278-8012

Trustees Approve 1996 Work Plan

The *Exxon Valdez* Oil Spill Trustee Council approved a final 1996 Work Plan December 11 at their meeting in Anchorage. The 1996 Work Plan funding totals $18.1 million and supports an ongoing program of restoration, research and monitoring of the biological resources injured by the 1989 oil spill.

The 1996 Work Plan emphasizes restoration efforts for herring, pink salmon, sockeye salmon, subsistence resources, seabirds and marine mammals. In addition, the Trustees continued their support for three comprehensive ecosystem projects: the Sound Ecosystem Assessment, Nearshore Vertebrate/Predator Ecosystem Project and the Seabird/Forage Fish Ecosystem Project. These projects are investigating different aspects of the marine ecosystem which affect the injured resources, such as climate, ocean currents, or fluctuations in populations of small fish which serve as food sources for harbor seals and seabirds populations injured by the spill. Researchers report that results from recent Pacific herring studies in Prince William Sound continue to forecast small returns, and that some seabird and marine mammal populations affected by the spill have not recovered to pre-spill levels.

The Trustees approved a portion of funding for the 1996 Work Plan at a previous meeting in August, but deferred decisions on some projects awaiting results of scientific reviews which took place this fall. Based on these reviews as well as preliminary analysis of restoration work conducted during the 1995 field season, Executive Director Molly McCammon made final project recommendations to the Trustee Council on December 11. Monday's approval of more than $4 million for 1996 restoration work, when combined with earlier decisions made by the Trustees in August, brought the Work Plan total to $18.1 million for federal fiscal year 1996.

For more information, contact the Oil Spill Public Information Center at 645 G St., Suite 100, Anchorage, Alaska 99501, or call 278-8008, toll-free within Alaska at 1-800-478-7745.

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Summary table attached...

Summary of the FY 96 Work Plan

Draft

Resource/Service Cluster	Approved in FY 95	Revised FY 96 Request	FY 96 and Estimated Future				
			FY 96	FY 97	FY 98	FY 99 to End	FY 96 to End
Pink Salmon	$2,543.5	$3,469.6	$2,017.5	$1,268.5	$775.2	$163.8	$4,225.0
Herring	$2,103.5	$1,432.2	$1,323.0	$930.6	$708.7	$0.0	$2,962.3
Sound Ecosystem Assessment (SEA)	$4,612.8	$5,154.8	$4,533.4	$3,600.0	$2,600.0		$10,733.4
SEA Program -- Related Projects	$0.0	$375.2	$114.8	$85.0	$85.0	$0.0	$284.8
Sockeye Salmon Program	$1,569.7	$2,198.0	$1,286.2	$391.0	$0.0	$0.0	$1,677.2
Cutthroat and Dolly Varden Trout	$134.8	$428.4	$229.6	$200.0	$100.0	$0.0	$529.6
Marine Mammal Program	$913.2	$1,099.5	$812.8	$687.3	$275.1	$25.0	$1,800.2
Nearshore Ecosystem	$3,112.4	$6,426.0	$2,989.2	$1,869.3	$1,789.4	$920.0	$7,567.9
Seabird/Forage Fish Ecoystem Pjct	$1,262.9	$1,982.6	$1,800.7	$1,750.7	$1,750.7		$5,302.1
Seabird/Forage Fish -- Related	$617.9	$1,419.2	$610.3	$200.3	$83.9	$458.5	$1,353.0
Subsistence	$1,006.9	$2,594.0	$1,352.2	$1,226.0	$957.5	$1,594.8	$5,130.5
Archaeological Resources	$457.7	$3,880.3	$504.2	$195.0	$195.0	$135.0	$1,029.2
Reducing Marine Pollution	$516.7	$163.3	$28.3				$28.3
Habitat Improvements	$286.6	$963.3	$560.6	$800.0	$600.0	$0.0	$1,960.6
Information Support	$0.0	$42.0	$42.0	$0.0	$0.0	$0.0	$42.0
Research Facilities	$0.0	$3,000.0	$0.0				$0.0
Total: Monitoring, Research, and General Restoration	**$19,138.6**	**$34,628.4**	**$18,204.8**	**$13,203.7**	**$9,920.5**	**$3,297.1**	**$44,626.1**
Public Information, Science Management, and Administration	$4,208.9	$3,439.6	$3,439.6	$3,200.0	$2,800.0	$7,200.0	16.625.1
Habitat Protection/Acquisition Support	$1,111.8	$1,193.0	$2,000.0	$170.0	$115.0	$115.0	$1,241.8
Restoration Reserve	$12,000.0	$12,000.0	$12,000.0	$12,000.0	$12,000.0	$48,000.0	$84,000.0
Total, All Activities	**$36,459.3**	**$51,261.0**	**$35,644.4**	**$28,573.7**	**$24,835.5**	**$58,612.1**	**$129,867.9**

Exxon Valdez Oil Spill Trustee Council

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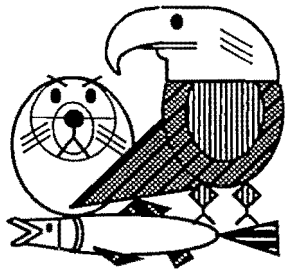

December 12, 1995

Matthew Cronin
LGL Research Associates, Inc.
Suite 101 4175 Tudor Centre Drive
Anchorage, Alaska 99508

Dear Mr. Cronin,

The purpose of this letter is to respond to your letter regarding the Alaska SeaLife Center project in Seward. As you may be aware, Jim Ayers has departed the Trustee Council staff to work for Governor Knowles and I wanted to respond to your letter on his behalf.

At the November 2 meeting of the Trustee Council, funding was authorized to support the construction of research facility improvements affiliated with the University of Alaska, Institute of Marine Science in Seward. A copy of the resolution adopted by the Trustee Council is enclosed. As indicated in the resolution, subject to a number of specific conditions, the facilities to be developed will be owned by the City of Seward and the City will provide for the operation and maintenance of the facility. As you may also be aware, the Seward Association for the Advancement of Marine Science (SAAMS), a non-profit corporation, has been involved with this project from the time of its inception. It is my understanding that the City of Seward and SAAMS are currently examining the question of the facility's operation.

If LGL is interested in the possibility of serving as the managing entity for the facility, I would suggest that you talk directly with Tyler Jones, City Manager, who has been working on this project on behalf of the City of Seward. If I can provide additional information, please let me know.

Sincerely,

Molly McCammon
Executive Director

cc: Bob Spies
Tyler Jones

Alaska Research Associates, Inc.

Suite 101, 4175 Tudor Centre Dr.
Anchorage, Alaska 99508
(907) 562-3339
FAX: (907) 562-7223

November 29, 1994

Mr. Jim Ayers
Exxon Valdez Oil Spill Trustee Council
645 "G" Street
Anchorage, AK 99501

Dear Mr. Ayers:

It has come to our attention that there will be a research facility at the Exxon Valdez Oil Spill-funded Alaska Sealife Center in Seward. LGL would like to be considered as managing entity of the research facility. In accordance with the GAO report, we think you will agree that competitive bidding on such functions is a highly desirable avenue for the Trustee Council to pursue.

Please let us know when a Request for Proposal will be forthcoming.

Sincerely,

LGL ALASKA RESEARCH ASSOCIATES, INC.

Matthew A. Cronin
Senior Research Geneticist

MAC/ab

cc: Bob Spies

Exxon Valdez Oil Spill Trustee Council

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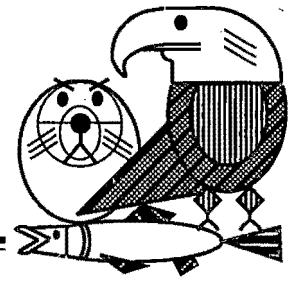

MEMORANDUM

TO: Restoration Work Force Members

FROM: Molly McCammon
Executive Director

DATE: December 12, 1995

SUBJ: Proposed FY97 DPD and Budget Instructions and Financial Operating Procedures

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Although the ink has yet to settle on the FY96 Work Plan, preparations are already underway for the FY97 Invitation. Simultaneous with this planning effort is the audit of Trustee Council expenditures that is currently being conducted by the firm of Elgee, Rehfeld and Funk. The auditors have already raised a number of questions about the existing Financial Operating Procedures (dated September 14, 1992), as well as questions concerning direct costs, general administration, and program management. These questions need to be answered prior to the FY97 Work Plan. For that reason, you will find attached three draft documents for your review:

1. Draft Detailed Project Description instructions. These are similar to those for FY96. Please review carefully and provide any comments in writing to Sandra Schubert by **December 29, 1995.**

2. Draft Budget Instructions. Again, these are similar to those for FY96. Please review this document, but ignore for the time being the sections on general administration and program management. These are being addressed as separate issues. Please provide any comments in writing to Traci Cramer by **December 29, 1995.**

3. Draft Financial Operating Procedures are still under development. The plan is to update the procedures and policies that are currently in place. The sections on direct costs, general administration, and program management are treated separately below.

4. Discussion & Options Paper on Direct Costs, General Administration and Program Management. We are putting forth for your review and later discussion a description of the issues, a variety of definitions and policies, and some options for your consideration. Please review carefully. This will be the subject of a Restoration Work Force meeting (tentatively scheduled for January 9 or 10). At this point, I have no position on these issues, but the audit team has highlighted them and they need to be addressed.

DRAFT FY 97 DPD INSTRUCTIONS

Major changes from the FY 96 DPD instructions are as follows:

• No electronic copy required -- it turns out we didn't use them in FY 96 and are not planning to use them in FY 97. Rather, those DPDs funded by the Trustee Council will be xeroxed and bound as an appendix to the final work plan.

• The first page of the DPD is a stand-alone page, which will be detached from the rest of the DPD and used for data entry into the Restoration Office's database. Staff will reproduce the first page when needed -- for example, when publishing the final work plan. This will allow us to correct project numbers, reflect actual funding approved, etc.

• The full DPD will be xeroxed for the final work plan, so it is no longer necessary to divide the DPD into a "public portion" (the first four pages) and a "scientist portion." This allows those sections that were duplicates in FY 96 to be deleted in FY 97.

• No budget information in the body of the DPD. We will rely on the Detailed Budget and the stand-alone page instead. The budget numbers very often change from the time of DPD submission to the time of Trustee Council approval, making the DPD inaccurate by the time of final work plan publication.

• An expanded section on normal agency management. This section is derived from the policy paper on normal agency management that is currently under review, and will be changed if necessary to reflect the policy that is finally adopted.

• PI's signature is no longer required (although we asked for it in FY 96, we accepted many DPDs without it). We still require PI's address/phone/etc., which we use to develop a contact list in the database.

• Require a footer on each page that includes the date the DPD was prepared.

APPENDIX A

Instructions for Preparing Detailed Project Descriptions

This appendix provides guidelines for preparing Detailed Project Descriptions (DPDs). For your project to be considered by the Trustee Council, you must provide three written copies of a Detailed Project Description (DPD) to the address below by **April 15, 1996.** In contrast to previous years, an electronic copy is not required.

Anchorage Restoration Office
645 G Street, Suite 401
Anchorage, AK 99501
Telephone (907) 278-8012
(Toll free within Alaska 1-800-478-7745; outside Alaska 1-800-283-7745)

Internet Address (ATTN B. Loeffler): Bob@evro.usa.com

NO FAXES PLEASE

If you are submitting your project under the Broad Agency Announcement, copies of the DPD must also be sent by April 15, 1996 to:

NOAA, WASC, Procurement Division, WC33
7600 Sand Point Way NE, Bin C15700
Seattle, WA 98115
Telephone (206) 526-6262

This appendix also provides general formatting instructions for DPDs. Following these instructions will assist Trustee Council staff in compiling the DPDs for publication in the FY 97 Final Work Plan.

General Formatting Instructions

- Font Times Roman 12 point or very similar font.
- Top and bottom margins .75"; left and right margins 1.0".
- Justify left.
- No header.
- Footer each page -- date prepared, page number, project number.
- *Exxon Valdez* in italics.
- Cover letters will be accepted, but will not be published.
- The first page of the DPD will be detached from the rest of the DPD by Trustee Council staff. Therefore, it must be a stand-alone page. (It will be used for data entry and will not be published.)

Project Title (Descriptive; Limited to 80 Characters if Possible); if the Project is Submitted Under the Broad Agency Announcement, add "Submitted Under the BAA" to the Title

Project Number:	(For continuing projects, the last three digits of the 1996 project number preceded by "97"; otherwise, leave blank)
Restoration Category:	(Research, Monitoring, or General Restoration if known; otherwise, leave blank)
Proposer:	(Name of Trustee Council agency for other organization -- University, individual, etc.)
Lead Trustee Agency:	(If known -- ADEC, ADFG, ADNR, DOI, NOAA, USFS)
Cooperating Agencies:	(Trustee agencies in addition to the lead agency that will receive funding under the project in FY 97, if known; otherwise leave blank)
Duration:	(What year in the project's life FY 97 is, and the number of federal fiscal years -- October 1st to September 30th -- during which funding has been received or will be requested from the Trustee Council; for example, "2nd year, 3 year project" or "1st year, 1 year project")
Cost FY 97:	(The amount of funding that is being requested for expenditure in FY 97; show all dollar amounts in $000,000 format)
Cost FY 98:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 98)
Cost FY 99:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 99)
Cost FY 00:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 00)
Cost FY 01:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 01)
Cost FY 02:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 02)
Geographic Area:	(Locations where field work will be conducted; e.g., Prince William Sound, Kodiak, Kenai Peninsula)
Injured Resource/Service:	(The resource -- or related service, if applicable -- injured by the oil spill that the project is designed to restore; see Table 1 for a list of injured resources and services)

ABSTRACT

Provide a brief (8 lines or less) abstract of the project -- basically, what the project would do. If the project is simply a close-out of previous years' work, say so. The abstract may be edited for clarity, brevity and readability by Trustee Council staff.

Please start a new page after the abstract.

Project Number, if known Prepared (date)

Please make sure this is the beginning of a new page.

tab over so in alignment

PROJECT NUMBER: Repeat from previous page.

↓ 1 carriage return

PROJECT TITLE: Repeat from previous page.

↓ 1

PROPOSER: Repeat from previous page.

Headings in all caps; bold

↓ 2 carriage returns before each heading

INTRODUCTION

↓ 1

What is the restoration effort being proposed? If the proposal is a continuation of a previous project, include a description of past efforts and results (reference projects funded in previous fiscal years and describe what has been done and what has been learned or accomplished to date), a description of the work being undertaken in FY 96, a description of the proposed FY 97 project, and the work planned for the future (each year until project completion). Provide other background necessary to understanding the project.

↓ 2

NEED FOR THE PROJECT

TAB OVER ↓ 1 carriage return before each sub-heading

A. ↓ Statement of Problem > subheadings in bold

↓ 1

What is the problem the project is designed to address? Discuss what injured resource or service the project is designed to restore. (See Table 1 on page _____ for a list of injured resources and services.) Include a brief summary of the status of the resource/service, and the rate or degree of recovery, if known.

TAB OVER ↓ 1

B. ↓ Rationale/Link to Restoration

↓ 1

Why should the work be done? Discuss how the project would address the problem -- that is, help restoration. Cite the relevant restoration objectives from the *Exxon Valdez Oil Spill Restoration Plan* (all objectives are repeated in Part 2 of this document) and how this proposal would help achieve them. For <u>research</u> projects, describe how the information developed by the proposal will contribute to achieving restoration objectives, giving specific examples whenever possible. For <u>monitoring</u> projects, explain why monitoring needs to be done this year or on the schedule being proposed. For <u>general restoration</u> projects, include what will be produced or accomplished that will contribute to achieving restoration objectives.

TAB OVER ↓ 1

C. ↓ Location

↓ 1

Where will the project be undertaken? Where will the project's benefits be realized? List communities that may be affected by the project.

COMMUNITY INVOLVEMENT

↓ 1

Is it appropriate to involve residents of spill-area communities in the project? Could the project benefit from local/traditional knowledge? Over the past two years, the Trustee Council has made a concerted effort to increase communication with spill area residents, particularly subsistence users, regarding restoration efforts and to encourage the use of traditional knowledge held by subsistence users in the development and implementation of restoration projects. Principal investigators, particularly those whose projects involve work in or near a community or whose restoration objectives are of particular interest to subsistence users, are asked to assist the Trustee Council in this effort.

Toward this end, describe the community involvement efforts that will be undertaken by the project being proposed. Options for involvement include hiring local residents and local boats for work on projects, arranging for local observation teams, contacting the Community Involvement Coordinator to arrange an informational meeting in the community near the project, or submitting articles or photographs for the Trustee Council newsletter. If you have questions about this section of the DPD or would like assistance in working with a community, contact Martha Vlasoff, Community Involvement Coordinator, at the Anchorage Restoration Office (278-8012).

↓ 2

PROJECT DESIGN

TAB OVER ↓ 1

A. ↓ Objectives

What are the project's research/restoration objectives, both for FY 97 and throughout the life of the project?

If your project has multiple objectives, please format them like the example below. Use this same format any time you include a list in your DPD.

[F4] in WordPerfect/DOS; [F7] in WordPerfect/Windows

1. [indent] Determine the foraging range of common murres.

2. [indent] Measure abundance and distribution of intertidal invertebrates that prey on herring eggs.

3. [indent] Determine the age and sex distribution of harlequin ducks.

TAB OVER

B. ↓ Methods

↓ 1

For research and monitoring projects, what specific hypotheses will be tested to meet the objectives? What data do you need to test these hypotheses? For hypotheses that will be addressed in FY 97, what methods will be used to generate the data? Include a description of scientific methods, field sites, data sets to be generated, and statistical procedures to be used to test hypotheses.

For monitoring projects, what is the statistical justification for the monitoring schedule being proposed? The justification must describe what level of change should be detected to achieve the restoration objective, and the statistical power of the proposed sampling program for detecting such a change.

For general restoration projects, what specific actions will be taken to restore the injured resource/service? For actions that will be undertaken in FY 97, include a description of scientific methods, field sites, data sets to be generated, a description of the statistical procedures that will be used to test performance, and the time frame over which results will be measured.

For projects that would supplement wild fishery stocks, what are the benefits and risks of the proposed supplementation effort? For more information, see the Pink Salmon Supplementation section in Part 2 of this document.

For projects that would involve the lethal collection of birds or mammals, how many individual birds or mammals are proposed for collection? When and at what locations? Include a discussion of the size and health of the population in question. Specify what non-lethal alternatives were considered, and whether required permits have been obtained. If you have questions about this section of the DPD, contact the Anchorage Restoration Office (278-8012).

For all projects, if applicable, discuss alternative methodologies considered, including why the methods proposed are better than alternative methods of achieving the objectives.

TAB OVER ↓ 1

C. ↓ Cooperating Agencies, Contracts, and Other Agency Assistance

↓ 1

If more than one Trustee agency is requesting funds for this project, describe each agency's duties and responsibilities under the project. Also explain why more than one agency is involved.

Which components of the project will be contracted to the private sector? Describe each contract, including what tasks will be contracted and why.

Which components of the project will require contracts for services with other governmental agencies, including universities? Describe each contract, including what tasks will be contracted and why.

↓ 2

SCHEDULE

TAB OVER ↓ 1

A. ↓ Measurable Project Tasks for FY 97 (October 1, 1996 - September 30, 1997)

↓ 1

When in FY 97 will major project tasks (for example, NEPA compliance, development of contract proposals and evaluation of bids, community meetings, sample collection, data analysis, etc.) be undertaken? Include a schedule of work for

FY 97 that specifies the dates for major tasks. This information will be used by Trustee Council staff to track project progress in order to prepare a quarterly project status report for presentation to the Trustees.

In your schedule, be sure to include submission of annual and final reports, which are due on April 15 of the year following the year in which the research project or restoration activity takes place. For a copy of the Trustee Council's *Procedures for the Preparation and Distribution of Reports*, contact the Restoration Office (278-8012).

Please format your schedule (here, and in part B below) like the following example.

remember the colon → [F4] in WordPerfect/DOS; [F7] in WordPerfect/Windows

Oct. 1- March 14: [indent] Arrange logistics (boats, equipment, contracts, etc.)
March 15 - April 10: [indent] Consult with subsistence harvesters
April 15: [indent] Submit annual report (FY96 findings)
May 14 - 20: [indent] Conduct initial surveys
June 5 - 16: [indent] Expert consultation and second surveys
July - September: [indent] Analysis of field data

TAB OVER ↓ |

B. ↓ Project Milestones and Endpoints

↓ |

When will each project objective be met? (Objectives listed here should be the objectives already listed under "Project Design", Part A.) Include a schedule, covering the entire life of the project (FY 97 and beyond), of when each project objective will be met. This information will be used by project reviewers during each year's project solicitation and evaluation process to assess whether projects are on track and suitable for continued funding.

TAB OVER ↓ |

C. ↓ Completion Date

↓ |

When will the work be completed? That is, during what fiscal year will all of the project's restoration objectives have been met?

↓ 2.

NORMAL AGENCY MANAGEMENT (NOTE: Proposers who are not employees of government agencies may skip this section)

↓ |

Why should the Trustee Council be the source of funds for this project? It is the policy of the Trustee Council that government agencies be funded only for restoration projects that they would not have conducted had the spill not occurred.

↓ |

In addressing the above question, discuss the following: Is the project within the legal mandate of a government agency? What, if any, similar projects have been conducted in the past without funds from the Trustee Council? Without the project, will there be additional injury to a resource or service that has not recovered from the spill? For monitoring projects, is the project necessary for the Trustee Council to fully document recovery of an injured resource or service? Will the project permanently improve management of an injured resource, and if so, what are the

prospects for obtaining future support from sources other than the Trustee Council in the near future?

↓ 2

COORDINATION AND INTEGRATION OF RESTORATION EFFORT

↓ 1

How is the project being coordinated and integrated with other restoration efforts? Describe with whom coordination has taken or will take place (other Trustee Council funded projects, ongoing agency operations, etc.) and what form the coordination will take (shared field sites, research platforms, sample collection, data management, equipment purchases, etc.). Also describe efforts to obtain matching funds from non-Trustee Council sources, and related or complementary work being undertaken by other entities.

↓ 2

PERSONNEL

↓ 1

What are the qualifications of the proposed Principal Investigator? Also provide a list of key personnel who will be working on the project in FY 97 and what their responsibilities will be.

(no need for signature)

Name of proposed Principal Investigator, if known
Affiliation
Mailing address
Phone number
Fax number
e-mail address, if known

Date prepared

APPENDIX B

Federal Fiscal Year 1997 Budget Instructions

Detailed budgets are due **April 15, 1996** at the same time as the Detailed Project Descriptions. If you are a **Trustee Agency**, refer to the instructions for Trustee Agencies on pages B3 - B9. If you are a **Non-Trustee Organization**, refer to the instructions for Non-Trustee Organizations on pages B10 - B15.

Part I. Technical Instructions for All

For your project to be considered by the Trustee Council, you must provide three copies of the required budget forms to the address below by **April 15, 1996.** A complete set of the budget forms is available from the Anchorage Restoration Office, as is a diskette. Proposers have the option of using the diskette or typing directly on the forms.

Anchorage Restoration Office
645 G Street, Suite 401
Anchorage, AK 99501
Telephone (907) 278-8012
(Toll free within Alaska 1-800-478-7745; toll free outside Alaska 1-800-283-7745)
E-mail Address (ATTN B. Loeffler): bobl@evro.usa.com
NO FAXES PLEASE

Fiscal Year
The Trustee Council operates on the federal fiscal year (FFY). The FFY 1997 budget is for the period October 1, 1996 through September 30, 1997.

The Forms
Multi-Trustee Agency Summary (Form 2A) - This form is used when multiple Trustee Agencies are cooperating on a project. It summarizes and represents the total funds requested for the project.

Trustee Agency Summary (Form 3A) - This form summarizes the proposed expenditures contained on the Trustee Agency Detail Forms.

Trustee Agency Detail (Form 3B) - These forms are used by individual Trustee Agencies to provide detailed expenditure information on personnel, travel, contractual, supplies, and equipment.

Non-Trustee Organization Summary (Form 4A) - This form summarizes the proposed expenditures contained on the Non-Trustee Organization Detail Forms.

Non-Trustee Organization Detail (Form 4B) - These forms are used by Non-Trustee Organizations to provide detailed expenditure information on personnel, travel, contractual, supplies, and equipment.

Project Number

Each project is assigned a unique number. For continuing projects, the last three digits of the 1996 project number preceded by "97" should be used. For new projects, you should leave the number blank.

Rules for Numbers

1. Unless otherwise noted, the costs should be stated in thousands of dollars. Therefore, $1,869,489 should be $1,869.5.
2. When the number "5" is the digit to be rounded, the number should be rounded to the higher rather than the lower amount.
3. Position information is reported by full-time equivalent positions (FTE), with months reflected with one digit to the right of the decimal point. Therefore, one and a half months should be 1.5.

Report Writing Costs

Trustee agencies should budget report writing costs in the fiscal year the report will be prepared. For continuing projects, include the cost of preparing an annual report. For close-out projects, include the cost of preparing the final report. However, if the project and the corresponding project report will be performed under contract, the costs of the report writing should be included in the same fiscal year that the project is being performed.

Other Special Costs

Each project must include the costs associated with NEPA compliance, community involvement, and funding for the principal investigator to attend two workshops in Anchorage for approximately six days total. Explain how much has been included in the comments field of the appropriate Summary Forms.

Diskette Usage

The following apply if using the diskette provided by the Restoration Office.

Document Links - Where appropriate, the forms contained on the diskette have been linked. This means that as data in one form is updated or changed, it will automatically be updated in the related forms. The only exception is the Proposed FFY 1997 Trustee Agency Total, located on the Multi-Trustee Agency Summary Form (2A). If more than one Trustee Agency is participating, the agencies will have to link the documents themselves.

Automatic Calculations - As indicated in the instructions, the forms automatically calculate some of the Proposed FFY 1997 costs.

Part II. Instructions for Trustee Agencies

This section was developed for Trustee Agencies. Non-Trustee Organization should turn to page B10.

Rules for Names

The following agency abbreviations should be used:

AK Dept. of Environmental Conservation	ADEC
AK Dept. of Fish & Game	ADF&G
AK Dept. of Natural Resources	ADNR
Dept. of Agriculture, Forest Service	USFS
Dept. of Interior	DOI
Dept. of Interior, Fish & Wildlife Service	DOI-FWS
Dept. of Interior, National Biological Survey	DOI-NBS
Dept. of Interior, National Park Service	DOI-NPS
National Oceanic & Atmospheric Admin	NOAA

General Administration for Trustee Agencies

Per the Trustee Council's Financial Operating Procedures, the general administration formula consists of 15% of each project's personnel costs and 7% of the first $250,000 of each project's contractual costs, plus 2% of contractual costs in excess of $250,000.

Equipment

Equipment previously purchased by the Trustee Council should be utilized to the maximum extent possible. Prior to requesting new equipment, the principal investigator should contact their agency's Trustee Council liaison to determine equipment availability.

Lead Trustee Agency Responsibilities

Each project received will be assigned a Lead Trustee Agency. The Lead Trustee Agency is responsible for ensuring that the budget is consistent with the Detailed Project Description and that any additional documentation is provided. In addition, as proposals are received from Non-Trustee Organizations, the Lead Trustee Agency will be responsible for incorporating the request into the appropriate Trustee Agency Forms, updating the request to include Lead Trustee Agency costs, and providing further documentation as requested.

Multi-Trustee Agency Summary (Form 2A)

HOW THE FORM WILL BE USED

This is a summary form which is used when multiple Trustee Agencies are cooperating on a project. **If only one Trustee Agency is involved, this form is not required.**

HOW TO COMPLETE THE FORM

1. *Authorized FFY 1996* - If the project was funded in FFY96, enter the total authorized by line-item, otherwise leave blank.

2. *Proposed FFY 1997* - Total requested by line-item for all cooperating agencies.

3. *Other Funds* - Enter the amount of funds from other sources that the project leverages and/or any agency contribution. If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to these other funds.

4. *Proposed FFY 1997 Trustee Agency Totals* - Total requested by each cooperating agency.

5. *Long Range Fund Requirements* - Total cost anticipated for all cooperating agencies through FFY2002 or the end of the project, whichever comes first.

6. *Comments* - Use this space to clarify the proposed project or highlight anything out of the ordinary.

7. *Project Identification Field* - Enter the project number, title, and lead agency.

8. *Prepared* - Enter the date this budget was prepared.

Trustee Agency Summary (Form 3A)

HOW THE FORM WILL BE USED

This form summarizes the proposed expenditures contained on the Trustee Agency Detail Forms.

HOW TO COMPLETE THE FORM

1. *Authorized FFY 1996* - If the project was funded in FFY96, enter the total authorized by line-item, otherwise leave blank.

2. *Proposed FFY 1997* - Total requested by line-item.

3. *Other Funds* - Enter the amount of funds from other sources that the project leverages and/or any agency contribution. If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to these other funds.

4. *Long Range Fund Requirements* - Estimated future years costs through FFY 2002 or the end of the project, whichever comes first.

5. *Comments* - At a minimum address the following;
   - If the project was funded previously under a different number, note the old number;
   - Identify what portion of the project cost is for NEPA compliance, report writing, community involvement, and workshop attendance;
   - Describe the source of other funds, matching requirements, and any conditions;
   - Explain anything that is out of the ordinary.

6. *Project Identification Field* - Enter the project number, title, and agency.

7. *Prepared* - Enter the date this budget was prepared.

Trustee Agency Detail (Form 3B)
Personnel & Travel

HOW THE FORM WILL BE USED
This form documents the personnel and travel costs of the proposed project.

DEFINITIONS
"Personnel" includes compensation of employees and their benefits for the time and effort devoted specifically to the execution of the project.

"Program Management" includes those costs which are not directly associated with execution of the project, but are related to direct administration of the project.

"Travel" includes the cost of transportation by public conveyance and per diem.

HOW TO COMPLETE THE FORM

1. *PM* - Those costs associated with program management should be indicated by placement of an * in this column.

2. *Name.* - Enter the first initial and last name of each person budgeted. If the name is unknown, enter vacant. For positions GS7/Range 14 or below, enter only the total number of positions requested (names are not required).

3. *Position Title* - Provide the position title.

4. *GS/Range/Step* - Enter the appropriate general schedule (GS) and step, or range and step.

5. *Months Budgeted* - Enter the number of months for each position.

6. *Monthly Costs* - Enter the total of salaries and benefits by position.

7. *Overtime* - Enter the overtime costs estimated for each position.

8. *Proposed FFY 1997 Personnel Costs* - If using the diskette, no input is necessary. If not, enter the total based on the following formula.

   (months budgeted x monthly costs) + overtime = Proposed FFY 1997 Personnel Costs

9. *Travel Description* - Include the destination and the purpose of any trips budgeted.

10. *Ticket Price* - Enter the round trip ticket price.

11. *Round Trips* - Enter the number of round trips. Use whole numbers.

12. *Total Days* - Enter the total number of days in travel status. Use whole numbers.

13. *Daily Per Diem* - Enter the daily per diem rate.

14. *Proposed FFY 1997 Travel Costs* - If using the diskette, no input is necessary. If not, enter the total based on the following formula.

    (Ticket Price x Round Trips) + (Total Days * Daily Per Diem) = Proposed FFY 1997 Travel Costs

15. *Project Identification Field* - Enter the project number, title, and agency.

16. *Prepared* - Enter the date this budget was prepared.

Trustee Agency Detail (Form 3B)
Contractual & Commodities

HOW THE FORM WILL BE USED

This form documents the contractual and commodities costs of the proposed project.

DEFINITIONS

"Contractual" covers such items as communication, printing, advertising, charters, equipment rental or lease, equipment repair and maintenance, and professional services.

"Commodities" are consumable supplies with an estimated life of less than one year and a unit value of less than $500.

HOW TO COMPLETE THE FORM

1. *Contractual Description* - Describe what is being purchased and its purpose.

   The Non-Trustee Organization forms are also required if a significant portion of the project will be sub-contracted.

2. *Proposed FFY 1997* - Enter the proposed FFY 1997 contractual cost.

3. *Commodities Description* - Describe what is being purchased and its purpose.

4. *Proposed FFY 1997* - Enter the proposed FFY 1997 commodities cost.

5. *Project Identification Field* - Enter the project number, title, and agency.

6. *Prepared* - Enter the date this budget was prepared.

Trustee Agency Detail (Form 3B)
Equipment

HOW THE FORM WILL BE USED

This form documents the equipment costs of the proposed project. **Equipment previously purchased by the Trustee Council should be utilized to the maximum extent possible.**

DEFINITIONS

"Equipment" is defined as non-consumable items having an estimated life of more than one year or a unit value greater than $500.

HOW TO COMPLETE THE FORM

1. *Replacement Equipment* - Put an R in this column if the request replaces equipment previously purchased by the Trustee Council.

2. *New Equipment Description* - Describe the equipment and its purpose.

3. *Number of Units* - Enter the number of units. Use whole numbers.

4. *Unit Price* - Enter the unit price.

5. *Proposed FFY 1997 New Equipment* - If using the diskette, no input is necessary. If not, enter the total based on the following formula.

   (Number of Units x Unit Price) = Proposed FFY 1997 New Equipment

5. *Existing Equipment Usage Description* - Describe existing equipment which will be used for the project and its purpose.

6. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.

7. *Inventory Agency* - Enter the agency which currently has the equipment on inventory.

8. *Project Identification Field* - Enter the project number, title, and agency.

9. *Prepared* - Enter the date this budget was prepared.

Part III. Instructions for Non-Trustee Organizations

The definition of a non-Trustee organization is any state, federal, private or non-profit organization not listed on page B3 "Rules for Names". The University of Alaska is considered a non-Trustee organization. Non-Trustee organizations must submit the Forms 4A and 4Bs.

For your project to be considered by the Trustee Council, you must provide three copies of the required budget forms to the address below by **April 15, 1996**. A complete set of the budget forms is available from the Anchorage Restoration Office, as is a diskette. Proposers have the option of using the diskette or typing directly on the forms.

Anchorage Restoration Office
645 G Street, Suite 401
Anchorage, AK 99501
Telephone (907) 278-8012
(Toll free within Alaska 1-800-478-7745; toll free outside Alaska 1-800-283-7745)
E-mail Address (ATTN B. Loeffler): bobl@evro.usa.com
NO FAXES PLEASE

If you are submitting your project under the Broad Agency Announcement (see page ## of the invitation), a copy of your budget forms and the Detailed Project Description must also be submitted to the address below by **April 15, 1996**:

NOAA, WASC Procurement Division, WC33
7600 Sand Point Way NE, Bin C15700
Seattle, WA 98115
Telephone (206) 526-6262

Lead Trustee Agency

Each project will be assigned a Lead Trustee Agency. The proposer will be notified of whom the Lead Trustee Agency is after all requests have been received. Do not include any Lead Trustee Agency costs in your budget.

Non-Trustee Organization Summary (Form 4A)

HOW THE FORM WILL BE USED

This form summarizes the proposed expenditures contained on the Non-Trustee Organization Detail Forms.

HOW TO COMPLETE THE FORM

1. *Authorized FFY 1996* - If the project was funded in FFY96, enter the total authorized by line-item, otherwise leave blank.

2. *Proposed FFY 1997* - Total requested by line-item.

3. *Indirect* - Input the proposed indirect project costs. Explain in the comments field.

4. *Other Funds* - Enter the amount of funds from other sources that the project leverages. If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to these other funds.

5. *Long Range Fund Requirements* - Estimated future years costs through FFY 2002 or the end of the project, whichever comes first.

6. *Comments* - At a minimum address the following:
   - An explanation of the indirect costs;
   - Describe the sources of other funds, matching requirements, and any conditions;
   - Identify what portion of the project cost is for report writing, community involvement, and workshop attendance;
   - Explain anything that is out of the ordinary.

6. *Project Identification Field* - Enter the project number, title, and your organization's name.

7. *Prepared* - Enter the date this budget was prepared.

Non-Trustee Organization Detail (Form 4B)
Personnel & Travel

HOW THE FORM WILL BE USED

This form documents the personnel and travel costs of the proposed project.

DEFINITIONS

"Personnel" includes compensation of employees and their benefits for the time and effort devoted specifically to the execution of the project and includes tuition for students.

"Travel" includes the cost of transportation by public conveyance and per diem.

HOW TO COMPLETE THE FORM

1. *Name* - Enter the first initial and last name of each person budgeted. If the name is unknown, enter vacant.

2. *Position Title* - Provide the position title.

3. *Months Budgeted* - Enter the number of months for each position.

4. *Monthly Costs* - Enter the total salaries and benefits by position.

5. *Overtime* - Enter the overtime costs estimated for each position.

6. *Proposed FFY 1997 Personnel Costs* - If using the diskette, no input is necessary. If not, enter the total based on the following formula.

   (months budgeted x monthly costs) + overtime = Proposed FFY 1997 Personnel Costs

7. *Travel Description* - Include the destination and the purpose of any trips budgeted.

8. *Ticket Price* - Enter the round trip ticket price.

9. *Round Trips* - Enter the number of round trips. Use whole numbers.

10. *Total Days* - Enter the total number of days in travel status. Use whole numbers.

11. *Daily Per Diem* - Enter the daily per diem rate.

12. *Proposed FFY 1997 Travel Costs* - If using the diskette, no input is necessary. If not, enter the total based on the following formula.

    (Ticket Price x Round Trips) + (Total Days * Daily Per Diem) = Proposed FFY 1997 Travel Costs

15. *Project Identification Field* - Enter the project number, title, and your organization's name.

16. *Prepared* - Enter the date this budget was prepared.

Non-Trustee Organization Detail (Form 4B)
Contractual & Commodities

HOW THE FORM WILL BE USED

This form documents the contractual and commodities costs of the proposed project.

DEFINITIONS

"Contractual" covers such items as communication, printing, advertising, charters, equipment rental or lease, equipment repairs and maintenance, utilities, and professional services.

"Commodities" are consumable supplies with an estimated life of less than one year and a unit value of less than $500.

HOW TO COMPLETE THE FORM

1. *Contractual Description* - Describe what is being purchased and its purpose.

2. *Proposed FFY 1997* - Enter the proposed FFY 1997 contractual cost.

3. *Commodities Description* - Describe what is being purchased and its purpose.

4. *Proposed FFY 1997* - Enter the proposed FFY 1997 commodities cost.

5. *Project Identification Field* - Enter the project number, title, and your organization's name.
6. *Prepared* - Enter the date this budget was prepared.

Non-Trustee Organization Detail (Form 4B)
Equipment

HOW THE FORM WILL BE USED

This form documents the equipment costs of the proposed project.

DEFINITIONS

"Equipment" is defined as non-consumable items having an estimated life of more than one year and a unit value greater than $500.

HOW TO COMPLETE THE FORM

1. *Replacement Equipment* - Put an R in this column if the request replaces equipment previously purchased by the Trustee Council.

2. *New Equipment Description* - Describe the equipment and its purpose.

3. *Number of Units* - Enter the number of units. Use whole numbers.

4. *Unit Price* - Enter the unit price.

5. *Proposed FFY 1997 New Equipment* - If using the diskette, no input is necessary. If not, enter the total costs based on the following formula.

   (Number of Units x Unit Price) = Proposed FFY 1996 New Equipment

6. *Existing Equipment Usage* - Describe existing equipment which will be used on the project and its purpose.

7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.

8. *Project Identification Field* - Enter the project number, title, and your organization's name.
9. *Prepared* - Enter the date this budget was prepared.

DRAFT

Discussion and Options Paper
General Administration and Program Management

I. General Administration Guidelines

The definition of what is a direct cost to a project and what is an indirect cost is not clearly identified in the existing financial operating procedures. The following guidelines for determining what costs should be included in the individual project budgets (direct costs) and what costs are to be recovered through the general administration formula (indirect costs) have been developed.

The general administration guidelines are based on the fundamental premise that:

a. The agencies are responsible for the efficient and effective administration of the projects.

b. The agencies are responsible for seeing that the funds have been expended and accounted for consistent with the Detailed Project Descriptions and that the objectives have been accomplished.

c. The agencies are responsible for employing whatever form of organization and management techniques may be necessary to assure proper and efficient administration.

d. General administration expenses will be kept to a minimum and applied in a consistent manner by all agencies.

A. Direct Project Expenses

To be allowable, costs must be necessary and reasonable for proper and efficient administration of the project, and not be a general expense required to carry out the overall responsibilities of the agency. In other words, direct costs are those costs that are identified with or linked to a particular objective of the project. Direct costs chargeable to the project are:

a. Compensation of employees for the time and effort devoted specifically to the execution of the project as outlined in the Detailed Project Description.

b. Cost of materials acquired, consumed, or expended specifically for the purposes outlined in the Detailed Project Description.

c. Cost of equipment required specifically for the purposes outlined in the Detailed Project Description.

d. Cost of specialized communication technologies required specifically for the purposes outlined in the Detailed Project Description.

e. Contractual services required specifically for the purposes outlined in the Detailed Project Description.

f. Cost related to production of the annual or final report.

g. Cost of travel incurred specifically for the purposes outlined in the Detailed Project Descriptions.

B. General Administration Expenses

The current general administration formula allows agencies to recover costs based on a percentage of personnel and contractual costs. Funds derived from the formula are intended to pay for costs that are (a) incurred for a common or joint purpose benefiting more than one project, (b) not readily assignable to a project, or (c) ancillary support services. General administration funds are intended to pay for:

a. The costs of basic office supplies which are consumed by multiple individuals working on various projects.

b. The cost of traveling to conferences and meetings for which the outcome of a project is not dependent on the information obtained.

c. The various levels of supervision to assure proper and efficient administration of the work plan.

d. The cost of payroll, personnel functions, maintenance and operation of space, data processing, clerical support, accounting, budgeting, auditing, mail and messenger services, and other incidental costs. Other incidental costs include expenses required to carry out the overall responsibilities of the agency, such as incidental long distance charges, incidental fax charges, and miscellaneous copying charges.

e. The cost associated with monitoring and supervising contractors.

C. Reassessment of the current General Administration Calculation

The compensation of employees for the time and effort devoted specifically to the execution of a project is a direct project cost. This compensation includes base salary, overtime, and benefits appropriate to the employee and the project. Since the cost of administering employees does not increase proportionally with the payment of overtime and benefits, the current practice of applying the general administration formula against the total personnel cost should be reassessed. One method would be to calculate the general administration formula against the base salary. This approach would be consistent with the policy of the Trustee Council in relationship to contracts, as the Financial Operating Procedures specifically recognize that the cost of monitoring and supervising contractors does not increase proportionally with the size of the contract. In addition, this approach is consistant with the OMB Circular relating to indirect costs, but would result in a decrease in general administration funds to the agencies.

II. Program Management Options

Budgeting the costs associated with managing the restoration program continues to be an issue. Although the Financial Operating Procedures allow the agencies to budget general administration to off-set the indirect cost of a project, it has been argued that the formula does not provide sufficient funds to ensure that the project is accomplished consistent with Trustee Council authorization and that additional funds are needed to pay for program managers.

By definition, program management is the maintenance of information and records on projects funded by the Trustee Council and ensuring that the objective of the project are met. While the

distribution of duties between the Liaisons and the program managers vary by agency, the responsibilities of the agency remains constant. By working closely with the project leaders, the agency coordinates and tracks all scientific studies, their respective schedules, and has an understanding of the work in process. This includes attending meeting for strategic planning and progress reviews, and the coordination of activities and information with other officials, the public, and the Restoration Office.

The following options have been developed to address the cost associated with program management.

Option 1 - Create a separate budget for program management for each agency and eliminate the general administration formula.

Currently, agencies receive funding for program management through the Restoration Work Force budget and the individual project budgets. The funding received by the agencies through the individual project budgets also includes general administration. Option 1 requires that each agency submit a separate budget for program management/GA that would incorporate the liaison, the program managers, and other administrative costs. This option would eliminate the formula for general administration.

Pros -

1. The costs associated with program management would be easily identifiable.

2. Agencies could anticipate the funds available and plan accordingly.

3. Allows for increased accountability. The purpose of the funds would be justified and the objectives would be clearly identified.

4. The exercise of adjusting the cost of a project for general administration would be eliminated.

Cons -

1. Moving the costs from the individual projects draws attention to the cost of program management.

2. The program management budgets would not be tied directly to project activity and may require adjustment after the work plan is determined.

Option 2 - Create a separate budget for program management for each agency and continue budgeting general administration for contractual services only in the individual project budgets.

Option 2 is identical to Option 1, except that the current formula for general administration associated with contractual services would be retained. Each agency would be required to submit a separate budget for program management that would incorporate the liaison, the program managers, and administrative support costs. The general administration rate for variable costs associated with monitoring and supervising contracts would continue to be included in the individual projects.

Pros -

1. The costs associated with program management would be easily identifiable.

2. Agencies could anticipate the funds available and plan accordingly.

3. Allows for increased accountability. The purpose of the funds would be justified and the objectives would be clearly identified.

4. The variable costs associated with monitoring and supervising contracts would be addressed.

Cons -

1. Moving the costs from the individual projects draws attention to the cost of program management.

Option 3 - Continue to incorporate the cost of program management in the individual project budgets.

In the FFY 1996 Work Plan, agencies were allowed to budget one month of a program manager in each project. While this approach sounded easy, in practice it was not. First, the time required to manage each project can vary. Second, during development of the budgets, numerous appeals were made to the Restoration Office for an increase beyond one month. Under Option 3, agencies would continue to be allowed to budget a maximum of one month (no exceptions) of a program manager. To ensure accountability, the duties and responsibilities of the program manager on each particular project would need to be clearly described in the Detailed Project Description.

Pros -

1. The inclusion of the duties and responsibilities of the program manager in the Detailed Project Description would increase accountability.

2. With the exception of including the duties of the program manager in the Detailed Project Descriptions, the agencies are familiar with this approach.

Cons -

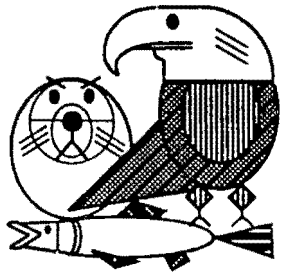
1. The inclusion of one month of a program manager implies that an individual devotes that time to the project. As such, if the project is assessed the expense, evidence must be maintained to support the charge. This results in increased costs associated with tracking time and attendance and adjusting charges between the various projects.

2. The cost associated with program management would be hidden in the individual project budgets.

3. The approval of one month of a program manager does not take into account the varying management requirements of the individual projects.

4. Until the work plan is approved, the resources available for program management will be unknown.

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



MEMORANDUM

TO: Carol Fries/ADNR
Nadeem Siddiqui/ADEC

FROM: Eric F. Myers, Director of Operations

DATE: 12/11/95

SUBJ: Geo/SQL Software

The Restoration Office was recently contacted by Ally Bailey, a representative of Geo/SQL [phone: (303) 940-9266 x-243], regarding the maintenance of the Geo/SQL software program on the Restoration Office Network.

From my conversation with Ms. Bailey, it is my understanding that the maintenance agreement has lapsed and that we will have to pay for future coverage. After speaking with various individuals, it appears that additional expenditures for maintenance of the program is not necessary due to the fact that nobody is using the program and that it has, in effect been superseded by alternative software applications.

Accordingly, I do not intend to update or service contract. As potential users of the software, I wanted to alert you to this situation. Given that there is no anticipated use for this application in the foreseeable future, I anticipate asking our network support contractor (Network Business Systems, who will soon be on site to work on the network) to remove Geo/SQL from the network and to store the software along with archived files that were created using Geo/SQL. This will allow access to the files in the future if needed but avoid the on-going maintenance expense.

Please let me know if you have need for use of the Geo/SQL application in the future.

cc: Hardware/Software Inventory File

ANCHORAGE DAILY NEWS December 10, 1995

Kenai River oil-spill fund could help restore lands

The Associated Press

KENAI — The Kenai City Council is hoping it may get some Exxon Valdez Trustee Council money to make improvements along the Kenai River.

A new fund, called the Kenai Habitat Restoration and Recreation Enhancement Project, has been designated to help restore public lands along the Kenai River that were indirectly affected by the 1989 Exxon Valdez oil spill.

Damage on the Kenai after the spill was twofold: Overescapement of fish was expected to lead to smaller runs in the future, and since fishing was closed in areas near the spill, fishermen came in droves to the Kenai Peninsula.

In discussing possible projects at a meeting this week, the council liked the idea of building boardwalks along the Kenai River flats.

But council members ultimately agreed that the council should address re-establishing the dunes along the river's mouth.

Trustees' buying spree is anti-development

By LEW M. WILLIAMS Jr.

KETCHIKAN — The Exxon Valdez Oil Spill Trustees estimate that they will spend between $350 million and $375 million by the year 2001 buying habitat to protect species threatened by the famous oil spill in 1989. To date, they have committed $175 million to habitat acquisition.

One of the latest commitments was made last month when the six trustees, three state and three federal, approved paying Kodiak Borough $42 million for Shuyak Island. Plus they made offers on 17 smaller parcels, primarily to protect the Kenai River from development which might damage salmon runs.

Protecting the Kenai River is a good idea as long as reasonable access is provided for recreation, although members of a local Native corporation want to retain their parcels of land and may block some of the sales. We don't begrudge the Kodiak Borough making what it can off its land. It is why it was done — and how — that raises questions.

Williams

The first question is why was the Shuyak Island purchased? Which species hurt by the oil spill are protected better by the state owning the land instead of the borough? The borough had no plan to log the island, borough officials claim.

Certainly, any species hurt by the spill will have recovered by the time the borough would have logged the trees, if it ever does.

So was this to protect certain species or to make a general stand against logging? And why the price paid?

The Spill Trustees report the price is based upon an appraised value of $3 million for the land and $30.3 million for the value of the old-growth timber on the island. Then $8.7 million was added as interest because the land will be purchased over seven years, the number of years left until Exxon makes its final $70 million payment in the $1 billion settlement.

What that means is that if there is a change of federal administrations next year and the state administration in three years that the trustees appointed by those administrations won't have any money left to spend. It will be gone to return private and municipal lands to the

state and federal government at prices that appear higher than necessary.

The Anchorage Daily News criticized early last month the price of $60 million the trustees spent for Native lands inside the Kodiak National Wildlife Refuge, saying it was much higher than any reasonable appraisal.

The Trustee Council admitted it took the high end of the appraisal in settling on a purchase price for the Kodiak Borough land. That doesn't say much for the fiduciary responsibility of the trustees — but since they are appointees of Democratic administrations (Clinton and Knowles), we guess it's appropriate.

On the other hand, Trustee Council staffers are a little frustrated in working with Alaska appraisers who give widely divergent appraisals on any tract. It is enough to cause a Democrat to say that appraising is done about the way House Speaker Newt Gingrich decided a seven-year time line for ending the federal budget deficit: "It was a hunch."

What is good is that the oil spill money is going to communities and Native corporations to boost their economies, although the intent of the Exxon Valdez oil spill settlement was to restore the injury caused by the spill.

Part of the money going to Kodiak, $6 million, will go into the Fishery Industrial Technology Center, which will help the fishing industry throughout Alaska as well as in the spill area. The trustees also have committed money to the Seward Sealife Center, another technological boost for fisheries in Alaska. The trustees turned down a request several years ago from the Chenega Native Corp. for money to establish a village store and a smokery. However, the trustees are negotiating to buy Chenega land so the corporation may get the money to do what it wants in an indirect manner.

The concern is the reason behind all of this land acquisition — not particularly how much goes to whom when there are willing buyers and willing sellers. Is it really to save habitat to assure revival of injured species, or is it masking a secondary goal to prevent logging, recreation use, access or other development?

Is that what was intended with the settlement?

One good action by the Trustee Council is to put aside $108 million by the time the last settlement payment is made in 2001. That will earn enough interest to create a pot of $130 million.

Earnings from that account will be used to continue research to determine the long-term effects of the oil spill. After all, we can't learn all about fish, birds and mammals whose affected life cycles will exceed the 10 years over which settlement payments are being made.

We hope the trustees will have satisfied their lust for land by then because there won't be much money after 2001 to buy land at high prices. It shouldn't be necessary.

Some of us question whether all of it is even necessary now.

Lew Williams Jr. is former publisher of the Ketchikan Daily News.

ANCHORAGE DAILY NEWS
December 9, 1995

reading file

PHONE COMMENT LOG

Name: Bruce Suzumoto | Affiliation: Public Power Council / Oregon | Phone: | Address:

ph: (503) 232-2427

non-profit / utility trade association (Portland)

address: 500 NE Multnomah / #729 / Portland ORE 97232

Add to mailing list? Yes____ No____ Newsletters only____ Technical Docs +____

Date of call: _____ Comment taker: _____

Subject of comments: _____

Comments:

#435M/year on fish and wildlife expenditures

X - Restoration Plan

X - Annual Status Rpt

X - MOA memorandum

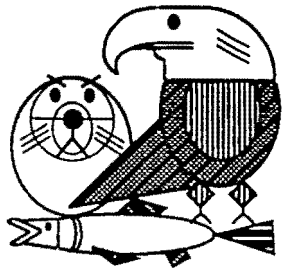
X - Organizational Chart

X - Invitation (FY96)

X - Financial Operating Procedures

All items were mailed to this person 12/8/95

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 8, 1995

Dr. Thomas Albert
Department of Wildlife Management
North Slope Borough
Box 69
Barrow, Alaska 99723

Dear Dr. Albert:

The *Exxon Valdez* Oil Spill Trustee Council sponsors a large research, monitoring, and general restoration program (about $18 million in FY 1996) in Prince William Sound and the northern Gulf of Alaska. Each year the Trustees hold a Restoration Workshop in Anchorage to update and foster information exchanges among people involved in the *Exxon Valdez* restoration program. The 1996 workshop is scheduled for January 16-18 in Anchorage.

My reason for writing you is that one of the themes of the 1996 workshop is "Combining Traditional Ecological Knowledge and Science." Because of your work as a scientist on the bowhead whale, and because of your association with the North Slope Borough, several people have suggested you as a possible speaker at the Restoration Workshop.

We expect about 150 people at the workshop, most of whom will be investigators and resource managers responsible for research and monitoring projects. The reason we are particularly interested in you is that you would be especially effective in giving the science participants a positive message that it is possible to combine traditional knowledge with a science program that benefits natural resources and is appropriate and satisfying for both scientists and residents of the affected areas. There will be other speakers who also will address this theme, including Larry Merculieff, but we are particularly keen to make sure we have at least one person who will speak as a peer to the scientists in the audience.

In addition to the science participants, there also will be people from communities affected by the oil spill (e.g., Chenega, Tatitlek, Cordova, Port Graham). One of our goals is to stimulate a positive dialogue about how the *Exxon Valdez* restoration program can be improved in terms of communication and participation on the part of both scientists and community residents.

Would you have interest and be available to participate on Tuesday morning, 16 January, in Anchorage? If needed, we would be able to pay for a plane ticket and cover your expenses (hotel and per diem) for your time here, although we cannot pay an honorarium. You are certainly welcome to stay for the entire workshop, and I have enclosed a draft agenda. I will follow up this letter by telephone, and I hope to learn quickly whether this is even a possibility for you. Thank you.

Sincerely,

Stanley E. Senner
Science Coordinator

SS/kh

[12/06/95 draft]

1996 RESTORATION WORKSHOP
January 16-18, 1995
Captain Cook Hotel, Anchorage

Day 1 - Tuesday (16th)

8:00 am	Registration
9:00	*Introduction & Annual Report on EVOS Program* Molly McCammon
9:45	*Traditional Ecological Knowledge and Science: Successful Examples* Larry Merculieff (2nd speaker, from science perspective, to be determined)
10:30	Break
11:00	*Traditional Ecological Knowledge and Science: the EVOS Restoration Program* (3-4 speakers/panel members to be determined)
12:00 pm	Buffet Lunch (in hotel)
1:15	*Integrating EVOS Science: Ecosystem Linkages* Robert Spies
2:00	*Subsistence and Archaeology* Session Chair: Martha Vlasoff
3:00	Break
3:30	*Environmental Characterization and Lower Trophic Levels* Session Chair: Ted Cooney
5:30-7:00	Reception and Poster Session (in hotel)

Day 2 - Wednesday (17th)

8:00 am	*Higher Trophic Levels - Forage Fish, Salmon, and Herring* Session Chair: Alex Wertheimer
9:45	Break
10:15	*Higher Trophic Levels - Mammals* Session Chair: Kathy Frost
11:15	*Higher Trophic Levels - Birds* Session Chair: David Duffy
12:00 pm	Buffet Lunch (in hotel)
1:00	*Birds* [continued]
2:00	*Ecosystem Structure and Functions* Session Chair: Don Schell
3:00	Break
3:30	*Disease, Ecotoxicology and Oiling* Session Chair: Stanley Rice

Day 3 - Thursday (18th)

8:00 am	*Fisheries Management, Stock Identification, and Resource Supplementation* Session Chair: Mark Willette
9:30	*Information, Science Management, and Administration* Molly McCammon
10:00	Break
10:30	*Updating the Injured Species List and Recovery Objectives* (Concurrent Sessions with PIs and others providing suggestions)
12:00 pm	Lunch (on your own)
1:30	*Alaska Sealife Center and EVOS Science* Mike Castellini
2:00	*Reactions from Peer Reviewers* ("Core" peer reviewers in a panel format)
3:00	*Closing Remarks* Molly McCammon
3:15	Adjourn

Exxon Valdez Oil Spill Trustee Council
Restoration Office
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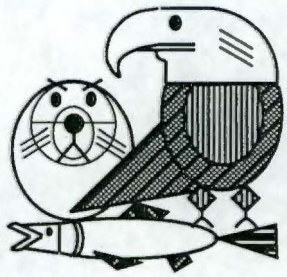


FAX COVER SHEET

To: Dr Albert Number: 907-852-0351

From: A. Senner Date: 12-8-95

Comments: Total Pages: 6

Hard copy to follow in mail.

Document Sent By: K

2/15/95

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

December 8, 1995

COPY

Catherine Berg
US Fish and Wildlife Service
1011 East Tudor Road
Anchorage, Alaska 99503

Dear Catherine:

Last August the Trustee Council added two species of birds, common loons and Kittlitz's murrelet, to the list of resources injured by the *Exxon Valdez* oil spill. At the same time, there was discussion of several other species groups, including scoters and cormorants. Although the Chief Scientist did not recommend adding any scoters or cormorants to the injured resources list, the Trustee Council specifically requested that there be additional analysis of data on these birds.

In formulating his recommendation, the Chief Scientist considered carcasses in the morgue, taking into account likely population sizes, plus the results of boat surveys funded by the Trustee Council or agencies. Exxon-funded boat surveys were an additional source of information.

In the case of both scoters and cormorants, the evidence of significant oil-spill injury was mixed and could be argued either way. What tipped the scales against recommending any scoter or cormorant species as injured was the judgment that numbers in the morgue were fairly small (e.g., 418 pelagic cormorants; 342 white-winged scoters) relative to what are presumed to be oil-spill area population sizes in the tens of thousands.

The Chief Scientist is now reviewing the entire injured species list, and would like to re-evaluate the status of scoters and cormorants at the same time. I am writing this letter to request your help as the Department of the Interior's restoration liaison. We are particularly interested in any information about seasonal numbers from the outer Kenai, Kodiak, and Alaska Peninsula coastal areas. Our hope is that refuge and park biologists from this area can provide information that will shed light on population sizes for these birds. The more species-specific the information, the better.

Would you circulate this request to the appropriate folks in the Fish and Wildlife Service, National Park Service, and National Biological Service? I have attached Dr.

'Robert Spies' memorandum to Molly McCammon dated May 16, 1995 as background.

Dr. Spies would like to complete his evaluation by the end of January. Please request that anyone having additional information send it to me at the Restoration Office by January 15. Thank you.

Sincerely,

Stanley E. Senner
Science Coordinator

enclosure (1)

cc: Dr. Robert Spies, Chief Scientist

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Trustee Council

FROM: Molly McCammon
Executive Director

DATE: August 14, 1995

RE: Additions to Injured Species List

We have received two proposals to add several bird species to the list of injured species published in the Restoration Plan. The plan allows for changes to this list through the council's scientific review process. The review process for these two proposals is now complete, and based on the Chief Scientist's recommendation (attached), I am recommending that the following be added to the list of injured species: Common Loons and Kittlitz's Murrelet (under the heading of *Brachyramphus* murrelets, which includes Marbled Murrelets).

APPLIED
marine
SCIENCES

August 14, 1995

TO: Molly McCammon,
Executive Director

FR: Robert Spies, Chief Scientist

RE: Possible Additions to the Injured Species List

Recommendation

The Trustee Council's Restoration Plan allows for amending the list of injured resources and services published in the plan by reviewing information to change the list through the council's scientific review process. The entire list will begin to be reviewed this winter to determine if injured resources have recovered. As part of the review, the recovery objectives for each resource are being scrutinized. A recommendation from that process is expected in the spring. Two proposals to add several bird species to the list of injured species have recently been considered through the scientific review process. I have examined, with the help of the reviewers and Mr. Stan Senner, all available data on the extent and severity of injury, including the results of Exxon-funded boat surveys. As a result, I recommend adding to the list Common Loons and Kittlitz's Murrelet (under the heading of *Brachyramphus* murrelets, which includes Marbled Murrelets). I recommend against adding cormorants, Arctic Terns, Mew Gulls, scoters, and Northwestern Crows. We are deferring a recommendation on listing the Black-legged Kittiwake pending receipt of additional information.

Background

The Executive Director's office has received two proposals to add several bird species to the injured species list. These are from (1) Kathy Kuletz, June 15, 1994, to add Kittlitz's Murrelet, and (2) Dave Irons, June 24, 1994, to add loons, cormorants, Arctic Terns, Mew Gulls, scoters, Northwestern Crows, and Black-legged Kittiwakes. As outlined in the Restoration Plan, these proposals have been considered through the scientific review process, including outside peer review (February 2, 1995, teleconference with Haney, Peterson, and Senner, who at that time was a peer reviewer).

We all realize that there are many more species injured by the Exxon Valdez oil spill than are listed in Table B-1 of the Restoration Plan. This list reflects those species for which there is evidence that the spill-area populations were particularly hard hit by the spill. However, placing additional species on this list should not imply any commitment on the part of the Trustee Council to allocate additional resources for research on, or restoration of, these species.

2155 Las Positas Court, Suite S Livermore, CA 94550 510 373 7142 FAX 510 373 7834

The following recommendations are based on the best available information about the relative severity of the injuries. This includes results of boat surveys funded by both the Trustee Council (Klosiewski and Laing 1994, Agler et al. 1994), other Trustee Council or agency-funded studies, and carcasses in the morgue, taking into account probable population sizes. In addition, we looked to Exxon's boat survey results (Day et al. 1995) for additional data. Of course, our recommendations would be reconsidered if significant new information were to come to light.

There are several criteria that were considered in making recommendations for addition of species to this list: 1) the severity of injury to the population, 2) whether recovery from injury is apparent, and 3) the strength of the evidence. With regard to this last criterion, we generally considered the estimated mortality, based on the number of carcasses recovered, relative to the total population size in the region as a threshold criterion. If the severity of injury appeared to be significant in terms of the population, then the government- and Exxon-funded population surveys were used as corroborating evidence.

Loons

Carcasses of 395 loons of four species were recovered, including at least 216 Common Loons, plus yellow-billed, red-throated, and Pacific loons. Population sizes are not known for any of these species. In general, however, loons are long-lived, slow-reproducing birds with small populations. The combined regional population may be a few to several thousand loons. Given the number of loon carcasses recovered, and the presumption that still more were not recovered, impact at the population level may have been consequential.

Population estimates decreased after the spill, but these were not statistically significant. There were fewer loons than expected along oiled shorelines in 1991. Exxon's boat surveys found "moderate evidence" of an initial spill impact on Common Loons on the Kenai coast.

Recommendation: Based on the morgue data and corroboration by the Exxon surveys, I recommend adding Common Loons to the injured species list.

Cormorants

Carcasses of 838 cormorants were recovered, including at least 418 pelagic, 161 red-faced, and 38 double-crested. Population sizes are not known for any of these species, but the combined regional population of cormorant species may be large (e.g., a few tens of thousands). Morgue numbers are low relative to rather substantial populations.

There is, however, statistically-significant evidence of declines from post -spill boat surveys in July, including comparisons of oiled versus unoiled areas. In addition, Exxon's boat surveys indicated "strong" evidence of initial negative impacts on Pelagic Cormorants in Prince William Sound and for Double-crested Cormorants on the Kenai coast.

Recommendation: Based on the low numbers of carcasses recovered in relation to the regional populations, I do not recommend that any cormorant species be added to the injured species list.

Scoters

Carcasses of 811 scoters recovered, including 342 white-winged, 175 surf, and 132 black scoters. Population sizes are not known for any of these species, but the combined regional population of scoter species is probably large (e.g., a few tens of thousands). Morgue numbers are low relative to rather substantial populations.

There is evidence of statistically significant population decreases after the spill, including comparisons of oiled and unoiled shorelines in 1990 and 1991. Exxon's boat surveys, however, found only weak evidence of initial impacts on Black Scoters in Prince William Sound.

Recommendation: Based on the low numbers of carcasses recovered in relation to the regional populations, I do not recommend adding any scoter species to the injured species list.

Arctic Terns

Carcasses of three Arctic terns were recovered. The size of the regional population is not known, but may be of medium size (e.g., high thousands, possibly a few tens of thousands). Morgue numbers are low relative to what we can presume is a fairly large population.

There is evidence of statistically significant population decreases after the spill, including comparisons of oiled versus unoiled shorelines in 1991. Exxon's boat surveys found no evidence of impacts.

Recommendation: Based on the low numbers of carcasses recovered in relation to the regional population, I do not recommend adding Arctic Terns to the injured species list.

Mew Gull

Carcasses of 33 Mew Gulls were recovered. The size of the regional population is not known, but may be of medium size (e.g., high thousands,

possibly a few tens of thousands). Morgue numbers are low relative to what we can presume is a fairly large population.

Population estimates generally decreased after the spill, but except for the 1991 survey on oiled shorelines, these were not statistically significant. Exxon's boat surveys indicated "strong" evidence of initial impacts both in Prince William Sound and on the Kenai coast.

Recommendation: Based on the low numbers of carcasses recovered in relation to the regional population, I do not recommend adding Mew Gulls to the injured species list.

Black-legged Kittiwakes

After receipt of the proposal from Dr. David Irons to add this species to the list of injured species, a letter dated October 6, 1994, was received from Dr. Scott Hatch, National Biological Service, raising substantive questions about injury to this species. Although we did review data on this species, our present review was inconclusive.

Recommendation: We recommend deferring further consideration of the proposal to list the Black-legged Kittiwake. Dr Irons is aware of the questions raised by Dr. Hatch and will be invited to respond to them.

Kittlitz's Murrelet

A total of 1092 murrelet carcasses were recovered, including 72 Kittlitz's, 612 marbled, and 413 unknown. The EVOS area is the center of the world Kittlitz's Murrelet population, which is quite small, perhaps less than 20,000 individuals (Van Vleit and McAllister 1994). Assuming that some of the recovered-but-unidentified murrelet carcasses are Kittlitz's and that more murrelets actually died than were recovered, the proportional impact on the Kittlitz's population may be as high or higher than that of any other single species affected by the oil spill.

Both Trustee- and Exxon-funded boat surveys provide some evidence of decreased post-spill murrelet populations, although this evidence is not strong. The Marbled Murrelet is listed as an injured species in the Restoration Plan, and some earlier Trustee Council documents (e.g., Restoration Framework in 1992) refer to injury to both marbled and Kittlitz's murrelets.

Recommendation: Based on the high numbers of carcasses recovered in relation to the probable regional and world population, I recommend adding Kittlitz's Murrelet to the injured species list. In the future documents should combine marbled and Kittlitz's murrelets under the heading of "*Brachyramphus* murrelets."

Northwestern Crow

Carcasses of 34 Northwestern Crows were recovered. The size of the regional population is not known, but it may be of medium size (e.g., high thousands or more). The number of carcasses is low relative to population size.

Population estimates after the spill generally decreased, but the decreases were not statistically significant. Only July surveys showed significantly fewer crows than expected when comparing oiled versus unoiled areas. In addition, Exxon's boat surveys indicated "strong" evidence of decline in Prince William Sound.

Recommendation: Based on the low numbers of carcasses in the morgues I recommend that Northwestern Crows not be added to the injured species list.

Literature References

Agler, B.A., P.E. Seiser, S.J. Kendall and D.B. Irons. 1994. Winter marine bird and sea otter abundances of Prince William Sound, Alaska: Trends following the *T/V Exxon Valdez* Oil Spill from 1989-1994. Restoration Report 94195. U.S. Fish and Wildlife Service, Anchorage (November 1994).

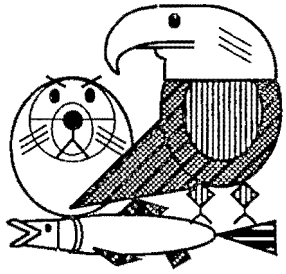
Day, R.H., S.M. Murphy, J.A. Weins, G.D. Hayward, E.J. Harner and L.N. Smith. 1995. Use of oil-affected habitats by birds after the *Exxon Valdez* oil spill., *Exxon Valdez Oil Spill: Fate and Effects in Alaskan Waters*, ASTM STP 1219, P.G. Wells, J.N. Butler and J.S. Hughes, Eds. American Society of Testing and Materials, Philadelphia, 1995.

Klosiewski, S.P. and K.K. Laing. 1994. Marine bird populations of Prince William Sound, Alaska, before and after the *Exxon Valdez* oil spill. Bird Study No. 2, U.S. Fish and Wildlife Service, Anchorage, Alaska (May 1994).

van Vleit, G. and M. McCallister. 1994. Kittlitz's Murrelet: The species most impacted by direct mortality from the *Exxon Valdez* oil spill. Pacific Seabirds 2, 5-7.

cc: D. Irons
K. Kuletz
S. Senner

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



PUBLIC SERVICE ANNOUNCEMENT

Date: December 8, 1995 95-29
Subject: Trustee Council Meeting on December 11, 1995
Contact: Eric Myers or L.J. Evans 278-8012

Please announce or post!

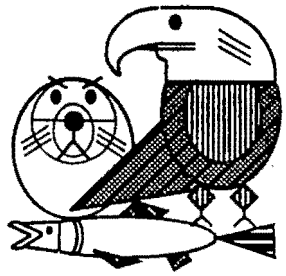
Exxon Valdez Oil Spill Trustee Council Meeting

The *Exxon Valdez* Restoration Trustee Council will meet in Anchorage on Monday, December 11, beginning at 9:00 AM. The meeting will also be accessible via teleconference at the Legislative Information Offices throughout the oil spill region and in Juneau at the Federal Building Forest Service Conference Room, Room 541-A. The public is welcome to attend.

- The agenda will include action on deferred FY96 Work Plan projects, small parcel habitat protection actions and action on the Kodiak Island Borough/Shuyak Island large parcel habitat purchase agreement.
- A public comment session will begin at 11:00 AM.
- Access by teleconference will be available upon request at the Legislative Information Offices or Volunteer Teleconference Centers in: Chenega Bay, Cordova, Fairbanks, Homer, Kenai, Kodiak, Seward, Soldotna, Tatitlek, Valdez and Whittier. Contact your Legislative Information Office to arrange to participate in this meeting.
- Persons who may need a special modification in order to participate in this meeting should contact L.J. Evans or Cherri Womac at 278-8012 to make any necessary arrangements.

###

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



December 8, 1995

Compuserve Incorporated
Attn: Business Accounts
Dept. L-742
Columbus, Ohio 43268-0742

To whom it may concern:

The member name on account 7219788, user ID# 73160,1771 needs to be changed. The name currently on the account is Ward Lane. This individual is no longer employed with our company. Please remove his name and add Tami Yockey as the member.

Should you have any questions regarding this matter, you can reach me at 907-278-8012.

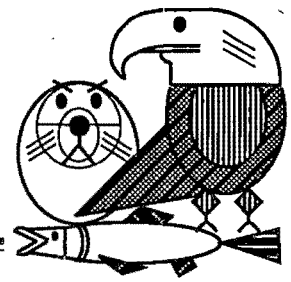
Sincerely,

Eric F. Myers
Director of Operations

ty

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178



MEMORANDUM

To: 1995 Project Leaders and Principal Investigators
Restoration Work Force and Liaisons

From: Molly McCammon
Executive Director

Date: December 7, 1995

Subj: Reminders about the 1996 Restoration Workshop

The dates of the 1996 Restoration Workshop--January 16-18--should be on your calendar by now, but here are some reminders before you are totally caught up in the Holiday Season.

The workshop will be held at the Captain Cook Hotel in Anchorage. You should make room reservations now. From Alaska, call 1-800-478-3100. From outside of Alaska, call 1-800-843-1950. Room rates are $75 single, $85 double. Ask for the "EVOS Trustee Restoration Workshop" or "Science Workshop" rate.

Abstracts are due now to Stan Senner, science coordinator, at the Restoration Office. Some abstracts are in, but we have not heard from many of you. I have enclosed another copy of the abstract guidelines in case you misplaced or did not receive the first set. These abstracts are crucial to the success of the meeting, so please gets yours in as quickly as possible!

I have enclosed a draft agenda for the meeting. Remember that there is not enough time for each investigator to give an oral presentation. **Expect to hear from Stan Senner or the chairs of individual sessions by Friday, December 15, if you are invited to give a talk.**

Please also remember that everyone, especially people who are not giving oral presentations, are encouraged to prepare poster papers to be displayed at the meeting. There will be a special poster session and reception on the first evening of the workshop, and there should be ample opportunity to share your results with your peers. **If you have questions about posters, call Bill Hauser at ADFG (267-2172).** Another copy of the poster guidelines is enclosed.

Thank you. Have a good Holiday Season, and we look forward to seeing you at the 1996 Restoration Workshop.

enclosures (3)

mm/ss/raw

DRAFT

[12/06/95 draft]

1996 RESTORATION WORKSHOP
January 16-18, 1996
Captain Cook Hotel, Anchorage

Day 1 - Tuesday (16th)

8:00 am	Registration
9:00	*Introduction & Annual Report on EVOS Program* Molly McCammon
9:45	*Traditional Ecological Knowledge and Science: Successful Examples* Larry Merculieff (2nd speaker, from science perspective, to be determined)
10:30	Break
11:00	*Traditional Ecological Knowledge and Science: the EVOS Restoration Program* (3-4 speakers/panel members to be determined)
12:00 pm	Buffet Lunch (in hotel)
1:15	*Integrating EVOS Science: Ecosystem Linkages* Robert Spies
2:00	*Subsistence and Archaeology* Session Chair: Martha Vlasoff
3:00	Break
3:30	*Environmental Characterization and Lower Trophic Levels* Session Chair: Ted Cooney
5:30-7:00	Reception and Poster Session (in hotel)

Day 2 - Wednesday (17th)

8:00 am	*Higher Trophic Levels - Forage Fish, Salmon, and Herring* Session Chair: Alex Wertheimer
9:45	Break
10:15	*Higher Trophic Levels - Mammals* Session Chair: Kathy Frost
11:15	*Higher Trophic Levels - Birds* Session Chair: David Duffy
12:00 pm	Buffet Lunch (in hotel)
1:00	*Birds* [continued]
2:00	*Ecosystem Structure and Functions* Session Chair: Don Schell
3:00	Break
3:30	*Disease, Ecotoxicology and Oiling* Session Chair: Stanley Rice

Day 3 - Thursday (18th)

8:00 am	*Fisheries Management, Stock Identification, and Resource Supplementation* Session Chair: Mark Willette
9:30	*Information, Science Management, and Administration* Molly McCammon
10:00	Break
10:30	*Updating the Injured Species List and Recovery Objectives* (Concurrent Sessions with PIs and others providing suggestions)
12:00 pm	Lunch (on your own)
1:30	*Alaska Sealife Center and EVOS Science* Mike Castellini
2:00	*Reactions from Peer Reviewers* ("Core" peer reviewers in a panel format)
3:00	*Closing Remarks* Molly McCammon
3:15	Adjourn

GUIDELINES FOR ABSTRACTS DUE DECEMBER 8

Abstracts are invited and expected from the project leader or principal investigator for each project that received EVOS Trustee Council funding in FY 1995. Please submit no later than **December 8, 1996** to Stan Senner, Science Coordinator, at the Restoration Office, 645 G Street, Suite 400, Anchorage, AK 99501.

Abstracts should be a **maximum of one typewritten, single-spaced page**, and should include:

(1) Project number and title;

(2) Principal Investigators, including names, mailing addresses (for each PI, if different), and telephone number for the lead investigator;

(3) purpose and objectives of the restoration study or project, including reference to injured resources (include scientific names for plants and animals);

(4) study area;

(5) brief mention of primary methods, materials, equipment (especially if not standard);

(6) description of major results in 1995, with reference to earlier results as needed; and

(7) summary comments that interpret or evaluate the results, especially in view of the status of the injured resource, restoration objectives, or future program directions.

These last two items are the most important, and should account for most of the substance of the abstract.

The abstract should not include detailed descriptions of experiments, organisms, and standard methods, nor references to the literature. In most cases tables and graphs will not be appropriate, but can be included if the abstract does not exceed one page.

A sample abstract is enclosed as a model.

If you have questions, please call Stan Senner at 907-278-8012.

Project Number and Title: 94166 - The impact of exposure of adult pre-spawn herring (*Clupea harengus pallasi*) on subsequent progeny

Principal Investigators: Mark G. Carls, Stanley D. Rice, and Robert E. Thomas, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, 11305 Glacier Highway, Juneau, AK 99801 (MGC telephone: 907-789-6019)

Abstract: The *Exxon Valdez* oil spill in Prince William Sound may have impaired reproduction and caused disease in herring stock. The primary objective of this laboratory study was to determine if exposure of parent fish would cause genetic damage in progeny. Reproductively ripe adult herring were exposed to oil in water to determine the presence or absence of direct toxic effects, damage to gonads, reduced resistance to disease, and genetic damage in larvae. Because it was not practical to measure germ line damage directly in the laboratory, efforts were focused on detection of chromosomal damage in the actively dividing somatic cells in the pectoral fins of larvae. Hydrocarbons accumulated in tissues of exposed herring, and mixed function oxidase activity was induced in liver tissue. Prevalence of viral hemorrhagic septicemia virus in adult herring increased as a function of oil concentration. Parental exposure to oil did not affect progeny. Parameters not affected included egg fertility, hatching success, hatch timing, embryo death, larval health (95 to 99% not moribund or dead within 24 h of hatch), larval swimming, larval abnormalities, stage of larval development at hatch, anaphase-telophase abnormalities, number of mitotic figures, number of pycnotic cells, and number of multinucleated or karyorrhectic cells.

NOTE: If you have questions or special needs, please call Bill Hauser at the Alaska Department of Fish and Game (267-2172).

POSTER DESIGN AND PREPARATION GUIDELINES

TIPS:

- Keep it simple, details are unnecessary
- Use a minimum of text and tables
- Maximize the use of illustrations and figures
- Make it self-explanatory
- Provide a logical, coherent story
- Make readable with large, bold lettering

CONTENTS:

- Title, followed by name and affiliation of the author(s)
- Abstract (upper left corner)- what, why, how, results
- Introduction- state the problem or area of investigation
- Purpose/Objectives- what you investigated
- Methods- lab techniques, experimental design, samplers
- Presentation of results- graphs, photos, art work,
- Conclusion- list findings, interpretations and implications

LAYOUT AND DESIGN (Figure 1):

- Poster area is 4 (wide)
- A 4-ft poster width can handle 3 columns (12" wide)
- For poster design see Figure 1 (enclosed)
- Place the abstract in the top left corner
- Follow with introduction, objectives, methods, etc.
- Use borders or "white" space to separate sections
- Avoid large blocks of text, leave "white" space
- "Block" main points comparable to "slides" in oral talks

TEXT AND READABILITY: (Figure 2)

- Title, use letters (caps) about 1" high
- Authors, affiliations, and text letters about 2/3" high
- Use a bold typeface (gothic, helvetica bold, megaron)
- All text should be easily read from a distance of 5 feet

ILLUSTRATIONS:

- Maximize the use of figures
- Minimize the use of tables, particularly complex ones
- Keep the figures simple and use bold lines and symbols
- Label (interpret) each figure with a "take-home" message

PRODUCTION METHODS:

- An array of microcomputer graphics programs are available
- Please use high quality printers (i.e., laser printers)
- Typesetting is expensive, but offers high quality results
- Enlargements or reductions by photocopiers or photography
- Kroytype machines and press-on lettering is acceptable

ASSEMBLY METHODS:

- Displays mounted on foamcore poster board are attractive
- Blocks of panels each 12 x 12" can be easily transported
- Titles can be scored and folded into 2-3 pieces
- Unmounted displays can be rolled up for convenient transport
- Please bring your own attachment supplies and materials
- Push pins, tacks, adhesive tape, velcro ribbon

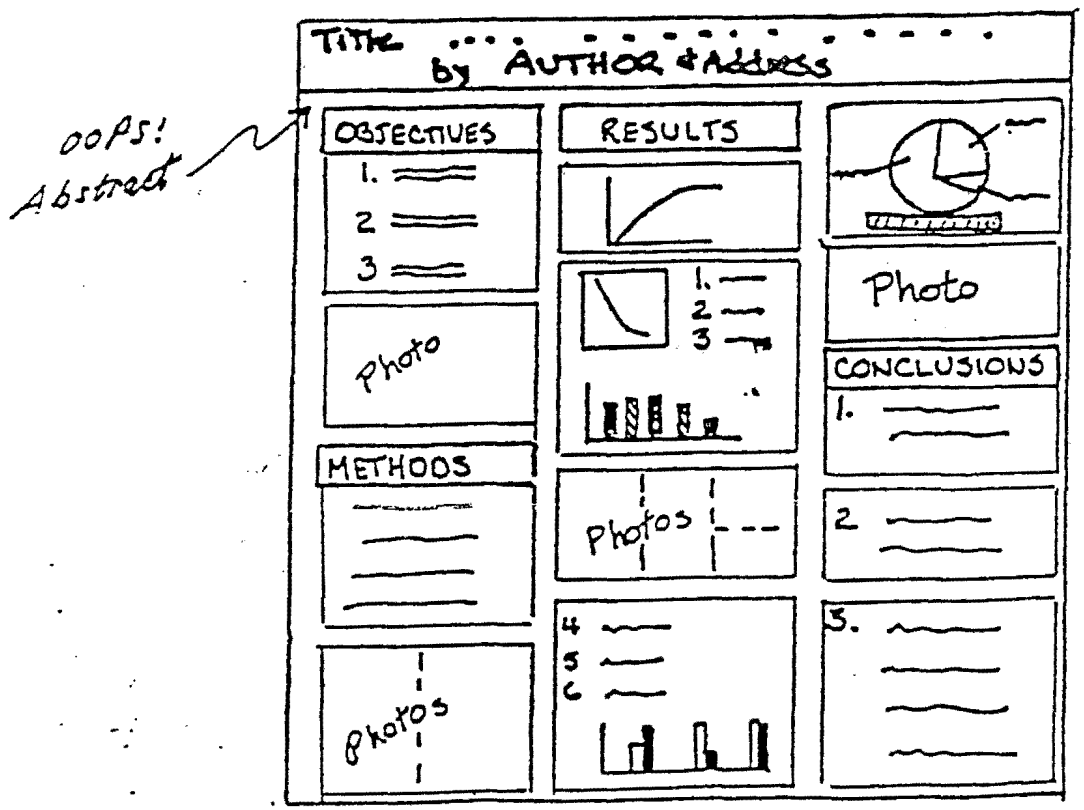
USE OF COLOR:

- Color will enhance poster readability and attractiveness
- Use colored backing paper to highlight and separate sections
- Color tape and yarn can connect/highlight key points
- Add color with markers, tape, yarn, backing paper

ADDITIONAL CONSIDERATIONS:

- No electrical outlets or extra space will be provided
- Please assemble and dissemble your poster on time

FIGURE 1. Sample poster design and layout.



Acknowledgements: L. A. Helfrich, B. A. LaFleur, and J. A. Rice

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Trustee Council

THROUGH: Molly McCammon
Executive Director

FROM: Traci Cramer
Administrative Officer

DATE: December 7, 1995

RE: Financial Report as of November 30, 1995

Attached is the Statement of Revenue, Disbursements and Fees, and accompanying notes for the *Exxon Valdez* Joint Trust Fund for the period ending November 30, 1995.

The following is a summary of the information incorporated in the notes and contained on the statement.

Joint Trust Fund Account Balance	$106,587,483	
Less: Current Year Commitments (Note 5)	$24,456,000	
Less: Restoration Reserve Balance (Note 6)	$36,000,000	
Plus: Adjustments (Note 7)	$310,878	
Uncommitted Fund Balance		$46,442,361
Plus: Future Exxon Payments (Note 1)	$420,000,000	
Less: Remaining Reimbursements (Note 3)	23,300,000	
Less: Remaining Commitments (Note 8)	$36,091,667	
Total Estimated Funds Available		$407,050,694

If you have any questions regarding the information provided please give me a call at 586-7238.

attachments

cc: Restoration Work Force
Bob Baldauf

NOTES TO THE STATEMENT OF REVENUE, DISBURSEMENTS AND FEES
FOR THE *EXXON VALDEZ* JOINT TRUST FUND
As of November 30, 1995

1. Contributions - Pursuant to the agreement Exxon is to pay a total of $900,000,000.

Received to Date	$480,000,000
Future Payments	$420,000,000

2. Interest Income - In accordance with the MOA, the funds are deposited in the United States District Court, Court Registry Investment System (CRIS). All deposits with CRIS are maintained in United States government treasury securities with maturities of 100 days or less. Total earned since the last report is $386,314.

3. Reimbursement of Past Costs - Under the terms of the agreement, the United States and the State are reimbursed for expenses associated with the spill. The remaining reimbursements represents that amount due the State of Alaska.

4. Fees - CRIS charges a fee of 10% for cash management services. Total paid since the last report is $38,631.

5. Current Year Commitments - Includes $12,456,000 for the Alaska SeaLife Center and the following land payments.

Seller	Amount	Due
Koniag, Incorporated	$4,500,000	September 1996
Akhiok-Kaguyak	$7,500,000	September 1996

6. Restoration Reserve - The total in the Restoration Reserve is $36,000,000.

7. Adjustments - Under terms of the Agreement, both interest earned on previous disbursements and prior years unobligated funding or lapse are deducted from future court requests. Unreported interest and lapse is summarized below.

	Interest	Lapse
United States	$48,676	
State of Alaska	$262,202	

8. Remaining Commitments - Includes the following land payments.

Seller	Amount	Due
Seal Bay	$3,091,667	November 1996
Akhiok-Kaguyak	$7,500,000	September 1997
Koniag, Incorporated	$9,000,000	September 1997 and 1998
Koniag, Incorporated	$16,500,000	September 2002

STATEMENT OF REVENUE, DISBURSEMENT, AND FEES
***EXXON VALDEZ* OIL SPILL JOINT TRUST FUND**
As of November 30, 1995

	1993	1994	1995	To Date 1995	Cumulative Total
REVENUE:					
Contributions: (Note 1)					
Contributions from Exxon Corporation	250,000,000	70,000,000	70,000,000	0	480,000,000
Less: Credit to Exxon Corporation for clean-up costs incurred	(39,913,688)				(39,913,688)
Total Contributions	210,086,312	70,000,000	70,000,000	0	440,086,312
Interest Income: (Note 2)					
Exxon Corporation escrow account					831,233
Joint Trust Fund Account	1,378,000	3,736,000	5,706,666	905,141	12,321,807
Total Interest	1,378,000	3,736,000	5,706,666	905,141	13,153,040
Total Revenue	**211,464,312**	**73,736,000**	**75,706,666**	**905,141**	**453,239,352**
DISBURSEMENTS:					
Reimbursement of Past Costs: (Note 3)					
State of Alaska	29,000,000	25,000,000			83,267,842
United States	36,117,165	6,271,600	2,697,000	0	69,812,045
Total Reimbursements	65,117,165	31,271,600	2,697,000	0	153,079,887
Disbursements from Joint Trust Account:					
State of Alaska	18,529,113	44,546,266	29,469,669	15,794,667	114,898,915
United States	9,105,881	6,008,387	48,019,928	8,000,000	77,454,696
Total Disbursements	27,634,994	50,554,653	77,489,597	23,794,667	192,353,611
FEES:					
U.S. Court Fees (Note 4)	154,000	364,000	586,857	90,514	1,218,371
Total Disbursements and Fees	**92,906,159**	**82,190,253**	**80,773,454**	**23,885,181**	**346,651,869**
Increase (decrease) in Joint Trust	**118,558,153**	**(8,454,253)**	**(5,066,788)**	**(22,980,040)**	**106,587,483**
Joint Trust Account Balance, beginning balance	24,530,411	143,088,564	134,634,311	129,567,523	
Joint Trust Account Balance, end of period	143,088,564	134,634,311	129,567,523	106,587,483	
Current Year Commitments: (Note 5)					(24,456,000)
Restoration Reserve: (Note 6)					(36,000,000)
Adjustments: (Note 7)					310,878
Uncommitted Fund Balance					**46,442,361**
Remaining Reimbursements (Note 3)					(23,300,000)
Remaining Commitments: (Note 8)					(36,091,667)
Total Estimated Funds Available					**407,050,694**

Statement 1

Statement of Exxon Settlement Funds
As of November 30, 1995

Beginning Balance of Settlement	900,000,000
Receipts:	
Interest Earned on Exxon Escrow Account	831,233
Net Interest Earned on Joint Trust Fund (See Note 1)	11,103,436
Interest Earned on United States and State of Alaska Accounts	1,972,613
Total Interest	13,907,282
Disbursements:	
Reimbursements to United States and State of Alaska	153,079,887
Exxon clean up cost deduction	39,913,688
Joint Trust Fund deposits	287,837,658
Total Disbursements	480,831,233
Funds Available	
Exxon future payments	420,000,000
Balance in Joint Trust Fund (See Statement 2)	106,587,483
Future acquisition payments	(48,091,667)
Alaska Sealife Center	(12,456,000)
Remaining Reimbursements	(23,300,000)
Other (See Note 2)	310,878
Total Estimated Funds Available	443,050,694

Note 1: Gross interest earned less District Court registry fees.
Note 2: Adjustment for unreported interest earned and lapse

Footnotes:

1 - The Joint Trust Fund Balance includes the Restoration Reserve Fund which has been allocated $36 million to date.

Statement 2

Cash Flow Statement
Exxon Valdez Oil Spill Settlement United States and State of Alaska Joint Trust Fund
As of November 30, 1995

Receipts:		
Exxon payments		
Deposit December 1991	36,837,111	
Deposit December 1992	56,586,312	
Deposit September 1993	68,382,835	
Deposit September 1994	58,728,400	
Deposit September 1995	67,303,000	
Total Deposits	287,837,658	287,837,658
Interest Earned	12,321,807	
Total Interest	12,321,807	12,321,807
Total Receipts		300,159,465
Disbursements:		
Court requests		
Withdrawal June 1992	12,879,700	
Withdrawal December 1992	6,567,254	
Withdrawal June 1993	21,067,740	
Withdrawal November 1993	29,950,000	
Withdrawal November 1993	4,743,925	
Withdrawal June 1994	15,860,728	
Withdrawal October 1994	10,664,256	
Withdrawal November 1994	3,111,204	
Withdrawal January 1995	13,911,091	
Withdrawal April 1995	17,200,000	
Withdrawal September 1995	1,652,014	
Withdrawal May 1996	30,951,032	
Withdrawal October 1995	12,500,000	
Withdrawal November 1995	11,294,667	
Total Requests	192,353,611	192,353,611
District Court Fees	1,218,371	1,218,371
Total Disbursements		193,571,982
Balance in Joint Trust Fund		106,587,483

Footnotes:

1 - The Joint Trust Fund Balance includes the Restoration Reserve Fund which has been allocated $36 million to date.

Schedule of Payments for Exxon Valdez Oil Spill Settlement Monies from Exxon
As of November 30, 1995

Disbursements:	*FFY 1991 December 31 1991*	*FFY 1992 December 1 1992*	*FFY 1992 September 1 1993*	*FFY 1994 September 1 1994*	*FFY 1995 September 1 1995*	*Total*
Reimbursements:						
United States						
FFY92	24,726,280	0	0			24,726,280
FFY93	0	24,500,000	11,617,165			36,117,165
FFY94	0	0	0	6,271,600		6,271,600
FFY95	0	0	0		2,697,000	2,697,000
Total United States	24,726,280	24,500,000	11,617,165	6,271,600	2,697,000	69,812,045
State of Alaska						
General Fund:						
FFY92	25,313,756	0	0			25,313,756
FFY93	0	16,685,133	0			16,685,133
FFY94	0	0	14,762,703			14,762,703
FFY95	0	0	0	0		0
Mitigation Account:						
FFY92	3,954,086	0	0			3,954,086
FFY93	0	12,314,867	0			12,314,867
FFY94	0	0	5,237,297	5,000,000		10,237,297
FFY95 (Prevention Account)	0	0	0		0	0
Total State of Alaska	29,267,842	29,000,000	20,000,000	5,000,000	0	83,267,842
Total Reimbursements	53,994,122	53,500,000	31,617,165	11,271,600	2,697,000	153,079,887
Deposits to Joint Trust Fund						
FFY92	36,837,111	0	0			36,837,111
FFY93	0	56,586,312	68,382,835			124,969,147
FFY94	0	0	0			0
FFY95	0	0	0	58,728,400	67,303,000	126,031,400
Total Deposits to Joint Trust Fund	36,837,111	56,586,312	68,382,835	58,728,400	67,303,000	287,837,658
Exxon clean up cost deduction	0	39,913,688	0	0	0	39,913,688
Total Disbursements	90,831,233	150,000,000	100,000,000	70,000,000	70,000,000	410,831,233

Remaining Exxon payments to be made:

September 1994	0
September 1995	0
September 1996	70,000,000
September 1997	70,000,000
September 1998	70,000,000
September 1999	70,000,000
September 2000	70,000,000
September 2001	70,000,000
	420,000,000

Schedule of Disbursements for Exxon Valdex Oil Spill United States and State of Alaska Joint Trust Fund
As of November 30, 1995

	June 1992	December 1992	June 1993	November 1993	December 1993	June 1994	October 1994	November 1994	January 1995	April 1995	May 1995	September 1995	October 1995	November 1995	Total
Disbursements:															
Court Requests															
United States															
FFY92	6,320,500	0	0	0	0	0									6,320,500
FFY93	0	3,074,029	6,031,852	0	0	0									9,105,881
FFY94	0	0	0	0	2,516,069	3,492,318	0								6,008,387
FFY95	0	0	0	0	0	0	3,576,179	0	4,676,182	17,200,000	1,480,251	21,087,316			48,019,928
FFY96														8,000,000	8,000,000
Total United States	6,320,500	3,074,029	6,031,852	0	2,516,069	3,492,318	3,576,179	0	4,676,182	17,200,000	1,480,251	21,087,316	0	8,000,000	69,454,696
State of Alaska															
FFY92	6,559,200	0	0	0	0	0									6,559,200
FFY93	0	3,493,225	15,035,888	0	0	0									18,529,113
FFY94	0	0	0	29,950,000	2,227,856	12,368,410									44,546,266
FFY95	0	0	0	0	0	0	7,088,077	3,111,204	9,234,909		171,763	9,863,716			29,469,669
FFY96													12,500,000	3,294,667	15,794,667
Total State of Alaska	6,559,200	3,493,225	15,035,888	29,950,000	2,227,856	12,368,410	7,088,077	3,111,204	9,234,909	0	171,763	9,863,716	12,500,000	3,294,667	99,104,248
Total Court Requests	12,879,700	6,567,254	21,067,740	29,950,000	4,743,925	15,860,728	10,664,256	3,111,204	13,911,091	17,200,000	1,652,014	30,951,032	12,500,000	11,294,667	168,558,944
District Court Fees															1,218,371
Total Disbursements															169,777,316

Total Disbursements represent the amount of funds which were either transferred to the State or Federal Governments and the Payment of District Court Fees.

Schedule of Work Plan Authorizations and Other Authorizations

	FFY 92	FFY 93	FFY 94	FFY 95	FFY 96	Total
Work Plan authorizations						
United States:						
June 15, 1992	6,320,500	0	0			
January 25, 1993	0	3,113,900	0			
January 25, 1993	0	6,035,500	0			
November 10, 1993	0	0	0			
November 30, 1993	0	0	2,567,800			
June 1994			4,536,800			
June 1994			84,500			
July 1994			1,500,000			
August 1994				2,245,600		
November 1994				2,842,900		
December 1994				749,600		
March 1995				1,484,100		
August 1995					6,202,100	
Total United States	6,320,500	9,149,400	8,689,100	7,322,200	6,202,100	37,683,300
State of Alaska						
June 15, 1992	6,559,200	0	0			
January 25, 1993	0	3,574,000	0			
January 25, 1993	0	7,570,900	0			
November 30, 1993	0	1,500,000	4,454,300			
June 1994			12,391,700			
June 1994			215,800			
July 1994			0			
August 1994				7,717,200		
November 1994				9,098,700		
December 1994				180,500		
March 1995				492,600		
August 1995					12,690,300	
Total State of Alaska	6,559,200	12,644,900	17,061,800	17,489,000	12,690,300	66,445,200
Total Work Plan authorizations	12,879,700	21,794,300	25,750,900	24,811,200	18,892,400	104,128,500
Other Authorizations						
United States:						
Orca Narrows (6/94, Eyak)			2,000,000	1,650,000		3,650,000
Kodiak National Wildlife Refuge (3/95, 9/95 AKI)				21,000,000		21,000,000
Kodiak National Wildlife Refuge (3/95, 9/95 Old Harbor)				11,250,000		11,250,000
Koniag					8,000,000	8,000,000
Total United States			2,000,000	33,900,000	8,000,000	43,900,000
State of Alaska:						
Kachemak Bay State Park (1/95)		7,500,000				7,500,000
Seal Bay (11/93,11/94)			29,950,000	3,229,042	3,294,667	36,473,709
Alaska SeaLife Center					12,500,000	12,500,000
Total State of Alaska		7,500,000	29,950,000	3,229,042	15,794,667	56,473,709
Total Land Acquisitions	0	7,500,000	31,950,000	37,129,042	23,794,667	100,373,709
Restoration Reserve			12,000,000	12,000,000	12,000,000	36,000,000
Total	12,879,700	29,294,300	69,700,900	73,940,242	54,687,067	240,502,209

Footnotes:

Work Plan Authorization and Land Acquisitions only. Will not balance to the Schedule of Disbursements from the Joint Trust Fund or the court requests due to the reauthorization of projects (carry-forward) and deductions for interest and lapse.

This schedule does tie to the quarterly reports with the exception of 93' and 92'. In FY93 the Work Plan represented the transition to the Federal Fiscal Year from the Oil Year or a seven month period. This schedule presents authorization on the Federal Fiscal Year and as such FFY92 and FFY93 does not balance.

The Trustee Council conditionally approved $181,900 for Fleming Spit on 6/1/95. However, the project was not approved by the Department of Justice and as such has not been included on this statement.

Exxon Valdez Oil Spill Joint Trust Fund Account						
Interest Earned/District Court Registry Fees						
As of November 30, 1995						
	FFY 1992	FFY 1993	FFY 1994	FFY 1995	FFY 1996	Total
Earnings Deposits	17,683	31,124	33,476	55,809		138,092
Earnings Allocated:						
1991	28,704					28,704
1992	526,613	553,696				1,080,309
1993		639,180	1,461,735			2,100,915
1994			1,876,789	1,402,937		3,279,726
1995				3,661,063	814,627	4,475,690
Total	555,317	1,192,876	3,338,524	5,064,000	814,627	10,965,344
Total Earnings	573,000	1,224,000	3,372,000	5,119,809	814,627	11,103,436
Registry Fees:						
1991	3,189					3,189
1992	19,811	100,223				120,034
1993		53,777	179,658			233,435
1994			184,342	180,072		364,414
1995				406,785	90,514	497,299
Total	23,000	154,000	364,000	586,857	90,514	1,218,371
Gross Earnings	596,000	1,378,000	3,736,000	5,706,666	905,141	12,321,807

Schedule of Interest Earned on United States and State of Alaska Accounts		
As of November 30, 1995		
State of Alaska EVOSS Account	United States NRDA& R	Total
June 1992	22,675			22,675
July 1992	23,952			23,952
August 1992	21,300			21,300
September 1992	12,847			12,847
October 1992	13,774			13,774
November 1992	11,775			11,775
December 1992	9,463			9,463
January 1993	7,670			7,670
February 1993	16,263			16,263
March 1993	13,862			13,862
April 1993	11,568			11,568
May 1993	10,309			10,309
June 1993	7,713			7,713
July 1993	38,502			38,502
August 1993	31,719			31,719
September 1993	21,069			21,069
October 1993	19,030			19,030
November 1993	28,561			28,561
December 1993	16,817			16,817
January 1994	22,398			22,398
February 1994	19,086		117,178		136,264
March 1994	20,754			20,754
April 1994	18,714			18,714
May 1994	15,878			15,878
June 1994	17,707		34,621		52,328
July 1994	52,823			52,823
August 1994	43,845			43,845
September 1994	40,408		43,567		83,975
October 1994	44,291		(5,950)		38,341
November 1994	63,286			63,286
December 1994	67,496			67,496
January 1995	89,341		3,849		93,190
February 1995	100,714			100,714
March 1995	104,570			104,570
April 1995	95,432		17,033		112,465
May 1995	92,595			92,595
June 1995	80,613			80,613
July 1995	76,424		50,042		126,466
August 1995	68,771		0		68,771
September 1995	59,945			59,945
October 1995	133,486		44,826		178,313
Total	1,667,446		305,167		1,972,613
Footnote: The $117,178 NRDA&R interest figure is a cumulative amount. Monthly and		
quarterly figures are not available for prior periods. Bob Baldauf at the Office of Budget		
will start tracking/recording on a quarterly basis.		
The October 1994 NRDA&R negative reflects an adjustment to interest earned.		

Schedule of Interest Adjustments to the Court Requests
As of November 30, 1995

	June 1992	*December 1992*	*June 1993*	*November 1993*	*December 1993*	*June 1994*	*October 1994*	*November 1994*	*December 1994*	*March 1995*	*August 1995*	*Total*	Unallocated Interest
Disbursements:													
Court Requests													
United States													
FFY92	0											0	
FFY93		39,871	3,648									43,519	
FFY94				0	51,231	22,427						73,658	
FFY95							34,621		37,618	3,849	63,226	139,314	
Total United States	0	39,871	3,648	0	51,231	22,427	34,621	0	37,618	3,849	63,226	256,491	48,676
State of Alaska													
FFY92	0											0	
FFY93		80,775	35,012									115,787	
FFY94				0	64,944	239,090						304,034	
FFY95							52,823	117,838	44,291	320,837	449,634	985,423	
Total State of Alaska	0	80,775	35,012	0	64,944	239,090	52,823	117,838	44,291	320,837	449,634	1,405,244	262,202
Total Adjustment	0	120,646	38,660	0	116,175	261,517	87,444	117,838	81,909	324,686	512,860	1,661,735	310,878

Footnotes:

The unallocated interest is tied to the INT Acct. sheet.

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Agency Liaisons

FROM: Traci Cramer
Administrative Officer

DATE: December 6, 1995

RE: Equipment Inventory Report

As discussed at the most recent Restoration Work Force meeting, the financial operating procedures require agencies to report equipment which is still functioning or has value and equipment which has ceased to function or have value by December 31 of each year. While it is recognized that there is much to do (as always) and that inventory is one of the least favorite tasks, it is requested that agencies submit their respective equipment reports to the Restoration Office by December 29, 1995.

To meet the requirement of the financial operating procedures, agencies are requested to submit two reports. Equipment which is still functioning or has value as of September 30, 1995 should be submitted as Report A. Equipment which has ceased to function or have value over the past fiscal year should be submitted as Report B.

It is requested that basic information be submitted for all items with an initial purchase price of $500 or more and other "sensitive" items. An outline of basic informational requirements of each report is contained on page two of this memorandum.

Thank you for your assistance. If you have any questions, I can be reached at 586-7238.

cc: Molly McCammon

REPORT A: EQUIPMENT STILL FUNCTIONING OR HAVING VALUE

Required Element	Example
Trustee Agency	ADNR/ADEC/ADF&G/DOI/USFS/NOAA
Item/Description	16 Ft. Skiff w/75hp Honda
Property ID No.	####
Acquisition Date	month/year
Purchase Value	$000
Condition	Excellent, Good, Poor
Physical Location	Office/Address
Custodian	Name/Phone No./Fax No.
FY96 Usage?	Yes/No (If yes, current TC project #)
Available in FY97?	Yes/No (If no, anticipated TC project #)
Comments	Other relevant information

REPORT B: EQUIPMENT WHICH HAS CEASED TO FUNCTION OR HAVE VALUE

Required Element	Example
Trustee Agency	ADNR/ADEC/ADF&G/DOI/USFS/NOAA
Item/Description	16 Ft. Skiff w/75hp Honda
Property ID No.	####
Acquisition Date	month/year
Purchase Value	$000
Date Surplused	month/year
Date Lost	month/year
Comments	Other relevant information

Exxon Valdez Oil Spill Trustee Council

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645 G Street, Suite 401, Anchorage, Alaska 99501-3451
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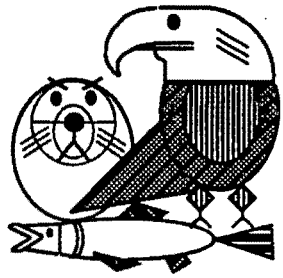

MEMORANDUM

To: Restoration Work Force Members

From: Molly McCammon
Executive Director

Date: December 4, 1995

Subj: December 5, 1995 Restoration Work Force Meeting

The Restoration Work Force will meet on **Tuesday, December 5 at 9:00 a.m.** The Juneau teleconference site will be the Executive Director's Office and the Anchorage location is the Restoration Office.

mm/raw

****
*** MULTI TRANSACTION REPORT ***
****

TX/RX NO. 2821

INCOMPLETE TX/RX

TRANSACTION OK	[09] 19075867589	JUNEAU OFFICE
	[10] 19075867555	D.GIBBONS
	[13] 19077896608	MORRIS-WRIGHT
	[15] 2698918	CAROL FRIES
	[16] 2672450	RITA MIRAGLIA
	[17] 2713992	R.THOMPSON
	[18] 2672474	J.SULLIVAN
	[19] 7863636	L.BARTELS
	[20] 7863350	C.BERG
	[21] 2572517	B.RICE
	[23] 19074656078	DEBBIE BOYD
	[24] 2697652	E.PIPER
	[35] 15103737834	B.SPIES
	[38] 2715827	G.BELT

ERROR

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 401, Anchorage, AK 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Restoration Workforce

FROM: Molly McCammon
Executive Director

SUBJECT: Draft Executive Director's Recommendation

DATE: December 4, 1995

Attached is a draft Executive Director's Recommendation for the deferred projects that the Trustee Council will consider on December 11th. We will discuss this at the workforce meeting beginning 9:00 tomorrow (Tuesday). The full spreadsheet with the wording of the Chief Scientist's and Executive Director's recommendation will be available at that time.

See you there.

****
*** MULTI TRANSACTION REPORT ***
****

TX/RX NO. 2854

INCOMPLETE TX/RX

TRANSACTION OK	[09] 19075867589	JUNEAU OFFICE
	[10] 19075867555	D.GIBBONS
	[13] 19077896608	MORRIS-WRIGHT
	[15] 2698918	CAROL FRIES
	[16] 2672450	RITA MIRAGLIA
	[17] 2713992	R.THOMPSON
	[18] 2672474	J.SULLIVAN
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	[38] 2715827	G.BELT

ERROR

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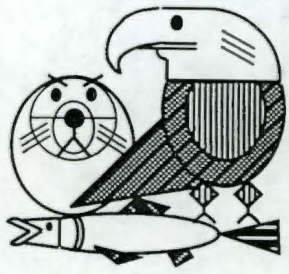

FAX COVER SHEET

To: Restoration Work Force

From: Molly McCammon Date: Dec. 4, 1995

Comments: Total Pages: 8

R-
Sandra's spread-sheet was the attachment to this memo-

FAX COMPLETE

RESTORATION WORK FORCE MEMBERS IN

Belt, Gina
Berg, Catherine
Fries, Carol
Gibbons, Dave
Joe Sullivan/Bill Hauser
Bartels, Leslie/Lisa Thomas
Miraglia, Rita
Morri
Piper
Rice, Bud
Spies, Bob
Thompson, Ray
Wright, Bruce

Document Sent By: Tami

8/17/95

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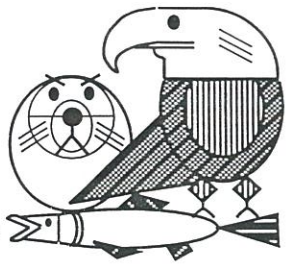

FAX COVER SHEET

To: Restoration Work Force

From: Molly McCammon Date: Dec. 4, 1995

Comments: Total Pages: 8

FAX COMPLETE

RESTORATION WORK FORCE MEMBERS INCLUDE:

Belt, Gina
Berg, Catherine
Fries, Carol
Gibbons, Dave
Joe Sullivan/Bill Hauser
Bartels, Leslie/Lisa Thomas
Miraglia, Rita
Morris, Byron
Piper, Ernie
Rice, Bud
Spies, Bob
Thompson, Ray
Wright, Bruce

Document Sent By: Jami

8/17/95

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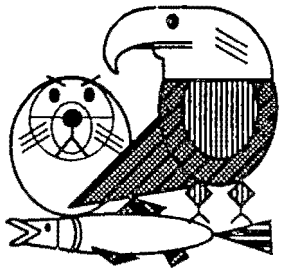


December 1, 1995

Gregg Gunnarson
Jack White Real Estate
3201 C Street, Suite 200
Anchorage, Alaska 99503-3994

Dear Mr. Gunnarson:

I appreciate you taking the time to meet with us and share the plans for the ADA and general building upgrades. The meeting was very helpful and we look forward to the improvements.

I want to confirm that there are two meetings that will be held on the first floor during December. The first will be on Wednesday, December 6 and possibly continue through December 7. The next will be on Monday, December 11. We would not anticipate any disruptive work in the immediate area during these two meetings. We will keep you apprised of any other meetings that may pose conflicts.

As noted in our discussion, there is a concern regarding the plans for a single door into the meeting room on the first floor. We are concerned that large items that are currently in the area will be unable to be removed. There is also the concern that a single door could constrict the flow of people in and out of the meeting room. We would ask that a double door be installed on the meeting side of the first floor. Your consideration is appreciated.

I will also express my concern once again regarding sheet rock dust getting into sensitive computer equipment. It would be greatly appreciated if visqueen curtains and the use of fans or other forms of ventilation could be used to contain any dust there might be. We have a very substantial monetary investment in the Trustee Council computer system and it is essential that it be protected.

A proposed schedule for painting and carpeting would be appreciated at your earliest convenience. We would like to keep the disruptions to staff members to a minimum.

Again, thank you for taking the time to meet with us. We greatly appreciate the opportunity to coordinate our efforts with your own. We very much look forward to the new and improved Simpson Building.

Sincerely,

Eric

Eric F. Myers
Director of Operations

EM/ty

Exxon Valdez Oil Spill Trustee Council
Restoration Office
645 G Street, Suite 401, Anchorage, Alaska 99501-3451
Phone: (907) 278-8012 Fax: (907) 276-7178

MEMORANDUM

TO: Gina Belt, U.S. Department of Justice
Barry Roth, U.S. Department of the Interior
Maria Lisowski, U.S. Forest Service
Craig Tillery, Alaska Department of Law

FROM: Molly McCammon
Executive Director

DATE: December 1, 1995

RE: Review of work products for habitat acquisitions

As you know, the Trustee Council took action at its meeting in Juneau on November 20 on Shuyak and on small parcels. In addition, we are still moving forward in an attempt to reach closure on Chenega and Tatitlek. Enclosed is a revised review schedule with some additional notes.

1. Small parcels

Enclosed is a copy of the signed small parcel resolution. Action on a second package of small parcels is anticipated for the December 11. It will likely include: the Karluk and Ayakulik parcels, and possibly a few additional adjacent lots at Ellamar.

2. Shuyak

You should all have a copy of the Shuyak Restoration Benefit Report. Craig Tillery will be circulating drafts of the resolution and purchase agreement for your review prior to the December 11 meeting. Action is expected on these at that time.

3. Chenega

Enclosed is the updated restoration benefits report for Chenega. It is possible that this acquisition will be on the agenda on December 11. Please review this draft as soon as possible. Any deal with Chenega will require a new resolution from the Council which will be circulated to you prior to the meeting.

4. Tatitlek

The draft restoration benefits report will be ready for review in mid-December. The appraisal is expected to be completed in late December, with action in late January possible. You should have a copy of the resolution passed on December 2, 1994. Any changes from this would require additional action by the Council.

Please let me know if you have any questions about any of this or if you have concerns about your ability to review materials in a timely fashion. Don't hesitate to give a yell (literally!) if you're not getting what you need! Thanks.

SMALL PARCELS

Prepare briefing materials and restoration benefit reports To attorneys & staff for preliminary review map draft restoration benefits reports	Nov. 3
Meet with state staff to discuss priorities	
Brief Governor's office	
Finalize appraisals Review Discussions with landowners	Nov. 9
Develop Executive Director's recommendation	Nov. 9
Briefing packets to Trustees report & recommendation in spreadsheet form maps & restoration benefits reports copies of public comment	Nov. 13
PAG briefing by teleconference	Nov. 16
Council action on first small parcel package	Nov. 20
Second small parcel package	Dec. 11

ON SCHEDULE

SHUYAK

Review appraisers meet	Nov. 2
Restoration Benefits report updated To attorneys & staff for preliminary review	Nov. 6
Government appraisal finalized	Nov. 8
Final negotiations with Kodiak Island Borough	Nov. 9-10
Briefing packet to Trustees old resolution new resolution new restoration benefits report	Nov. 13
PAG briefing by teleconference	Nov. 16
Council action	Nov. 20

DONE ON SCHEDULE

CHENEGA

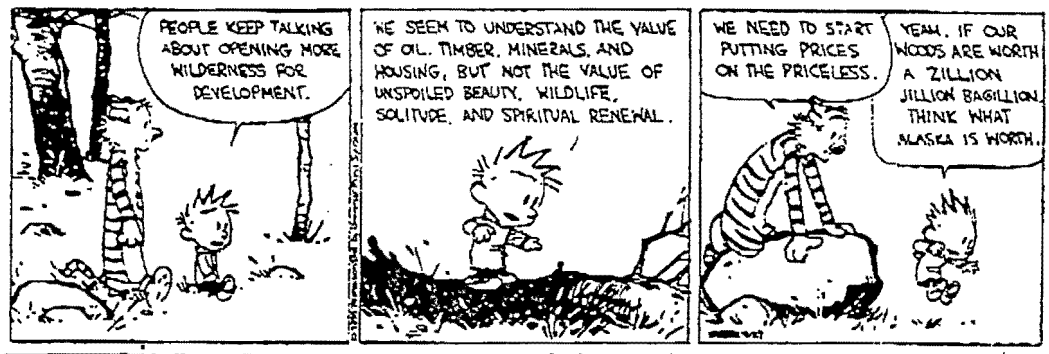
Revised appraisal completed	Nov. 30
Restoration benefits report updated	Nov. 30
To attorneys & staff for preliminary review	Dec. 4
Appraisal reviewed and finalized	Dec. 1
Final negotiations with Chenega	Dec. 5-6
Briefing materials to Trustees	Dec. 7
PAG briefing	Dec. 6
Trustee Council action	Dec. 11

MODIFIED SCHEDULE November 29, 1995

TATITLEK

Appraisal completed	Dec. 25
Restoration benefits report updated	Dec. 15
To attorneys & staff for preliminary review	Dec. 30
Appraisal reviewed and finalized	Jan. 15
Final negotiations with Tatitlek	Jan. 17-18
Briefing materials to Trustees	Jan. 20
PAG briefing	Jan. 23
Trustee Council action	Jan. 26

REVISED SCHEDULE November 29, 1995



Post-it® Fax Note 7671	Date 11/29/95	# of pages ▶ 1
To Molly McCannon	From Alex Swiderski	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 276-7178	Fax #	

DRAFT

Restoration Benefit Report

CHENEGA CORPORATION LANDS

REGION

Chenega Corporation lands proposed for habitat protection and acquisition are in western Prince William Sound.

DESCRIPTION OF PROPOSED ACQUISITION

The Chenega Corporation lands proposed for protection through fee simple and partial interest (conservation easement) acquisition are composed of approximately 70,000 acres along the southwest side of Prince William Sound. All lands being considered for acquisition from Chenega Corporation have a split estate with subsurface ownership with the regional corporation, Chugach Alaska Corporation.

Chenega Corporation lands include Chenega Island and parts of Evans, Latouche, Flemming, and Knight Islands as well as significant areas on the mainland on the west side of Dangerous Passage. The area is characterized by mountains with elevations to 2,500 feet. The lower slopes adjacent to lakes, streams and bays are forested with old growth Sitka spruce and western hemlock. Until recently, western Prince William Sound was glaciated and still remains very remote and wild.

Portions of the Chenega lands have some of the highest rankings in the comprehensive habitat evaluation process. Two parcels in particular are widely recognized for their exceptional beauty and biological productivity. Jackpot Bay and Eshamy Bay provide important sockeye salmon spawning and rearing habitat. The Jackpot and Eshamy lands are key areas for sport fishing, commercial fishing, subsistence, and recreation in Prince William Sound, and are high value for a number of injured resources. Eshamy Bay has the highest population of cutthroat trout in western Prince William Sound, and is the northern and westernmost extent of that species range. Jackpot Bay has a large colony of pigeon guillemots immediately adjacent to the parcel. In the Eshamy and Jackpot area there are 22 anadromous streams of which two (Jackpot and Eshamy) are major producers of pink and sockeye salmon.

The Alaska National Interest Conservation Act (ANILCA) required a study be submitted to Congress

with recommendations as to the suitability or nonsuitability of wilderness within the Prince William Sound area of the Chugach National Forest.[1] This report recommended that the mainland and islands in western Prince William Sound be classified as wilderness. While Congress has not acted on the report, all land within the Nellie Juan/College Fjord Wilderness Study Area are being managed as wilderness pending action by Congress. Any lands purchased from Chenega Corporation will be managed as wilderness.

Western Prince William Sound is one of the areas most impacted by the 1989 *Exxon Valdez* oil spill. The greatest amount of residual oil still remaining within the spill-affected area is within the Chenega region. The Chenega area has been considered by many as "ground zero" for spill related effects. All resources and services in the area were injured and would benefit from habitat protection.

RESTORATION BENEFITS

The Chenega lands provide important habitat for several species of fish and wildlife for which significant injury from the spill has been documented. The Trustee Council's comprehensive habitat evaluation process[2] evaluated and ranked various Chenega parcels as having high value for injured resources and services, as shown below:

Resource/Service	Chenega Parcels Ranked as High Value
pink salmon	Jackpot Bay, Granite-Paddy-Ewan Bays
sockeye salmon	Eshamy Bay, Jackpot Bay
cutthroat trout	Eshamy Bay
Dolly Varden	Eshamy Bay, Jackpot Bay
bald eagle	Eshamy Bay, Granite-Paddy-Ewan Bays, NW Chenega Island, SE Chenega Island, Fleming Island, NW Evans, Sleepy Bay
black oystercatcher	NW Chenega Island
harbor seal	NW Chenega Island, Fleming Island, NW Evans Island
harlequin duck	Jackpot Bay, NW Chenega Island
marbled murrelet	NW Evans Island
pigeon guillemot	Jackpot Bay, Pleiades Islands, SE Chenega
river otter	Eshamy Bay
sea otter	Granite-Paddy-Ewan Bays, NW Chenega Island, NW Evans Island
recreation/tourism	Eshamy Bay, Jackpot Bay
wilderness	Jackpot Bay, Granite-Paddy-Ewan Bays, NW Chenega, South Knight Island, NE Whale Bay, Fleming Island, NW Evans Island, Pleiades Islands
cultural resources	NW Chenega Island, SE Chenega Island, South Knight Island, Sleepy Bay
subsistence	Eshamy Bay, Jackpot Bay, Granite-Paddy-Ewan Bays, NW Chenega Island, SE Chenega Island, South Knight Island, Fleming Island, NW Evans, Sleepy Bay, Pleiades Islands

The Eshamy Bay (CHE 01) and Jackpot Bay (CHE 02) parcels were ranked among the highest of all parcels in the entire spill area and are important to a wide variety of spill injured resources and services. Together, the two parcels provide habitat of high value to pink salmon, sockeye salmon, cutthroat trout, Dolly Varden, bald eagle, harlequin duck, pigeon guillemot, river otter, recreation/tourism, wilderness, and subsistence. Eshamy Bay and Jackpot Bay have the highest number of pink salmon in the region with 22 anadromous streams. Eshamy Bay is the highest sockeye salmon producing system in western Prince William Sound. The Eshamy and Jackpot area has important wintering lakes and supports strong populations of Dolly Varden as well as fourteen documented

bald eagle nests and important feeding areas. The area is an important breeding area and important overwintering area for harlequin ducks. There is a large colony of pigeon guillemots adjacent to the parcel. Eshamy has high concentrations (based on pre-spill documentation) of river otters. There are currently high levels of recreation with increasing potential with the area being a destination sport fishing area for nearby major population areas. The Eshamy Bay and Jackpot Bay parcels also have high value for subsistence use for the village of Chenega.

Other Chenega lands (CHE03, CHE 04, CHE 05, CHE 06, CHE 07, CHE 08, and CHE09) were also identified as having high value for a variety of injured resources/services including pink salmon, bald eagle, black oystercatcher, harbor seal, harlequin duck, marbled murrelet, pigeon guillemot, sea otter, wilderness, cultural resources, recreation/tourism, and subsistence.

Protection of Chenega Corporation lands through the acquisition of fee simple and conservation easement interests would benefit the recovery and restoration of injured resources and services. Pink salmon, sockeye salmon, cutthroat trout, and Dolly Varden are potentially susceptible to water quality and timber harvest impacts that could otherwise occur. Black oystercatchers are sensitive to loss of nesting habitat and disturbance during nesting. Harlequin ducks are highly sensitive to disturbance and loss of nesting habitat. Harbor seals have the potential to benefit from parcel acquisition through control of potential disturbances. Pigeon guillemot colonies require special protection from habitat loss and disturbance. Bald eagles could experience loss of nesting habitat and river otters a loss of denning habitat if not protected. Marbled murrelets are sensitive to loss of nesting habitat and disturbance during nesting. Sea otters are sensitive to disturbance during pupping which occurs in May and June. Subsistence, recreation and wilderness based services are all sensitive to development that could result in increased user group conflicts if harvest and access are restricted.

TERMS AND CONDITIONS

Areas likely to be protected by fee simple acquisition are Jackpot and Eshamy Bays. Partial interest easements are likely for the remainder of Chenega lands. The acquisition price will be determined at the time the appraisal is completed. The source of funds for the purchase of fee simple and conservation easements will be the civil trust funds, as well as federal criminal settlement funds.

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1 Section 704 of ANILCA.

2 *Comprehensive Habitat Protection Process — Large Parcel Evaluation and Ranking*, Volume 11 (November 30, 1993).

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