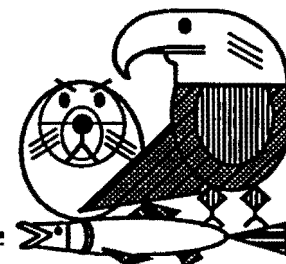


# Exxon Valdez Oil Spill Trustee Council

Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Donald M. Schell  
Director  
Institute of Marine Science  
University of Alaska, Fairbanks  
Fairbanks, Alaska 99775

Dear Mr. Schell:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Sincerely,

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Molly McCammon  
Director of Operations

Attachment

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#### Trustee Agencies

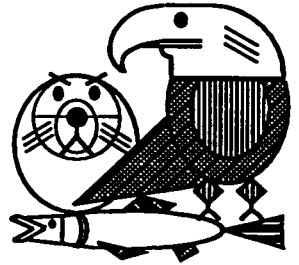
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---

March 11, 1994

Jeffrey Short  
NOAA/National Marine Fisheries  
Auke Bay Laboratory  
11305 Glacier Highway  
Juneau, Alaska 99801-8686

Dear Mr. Short:

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Molly McCammon  
Director of Operations

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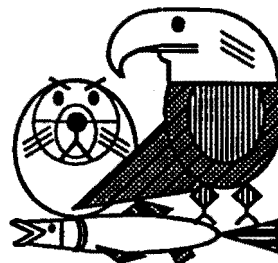
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Marilyn Dahlheim  
NOAA/Alaska Fisheries Science Center  
National Marine Mammal Laboratory  
7600 Sand Point Way NE  
BIN C15700 Bldg 3  
Seattle, Washington 98115-0070

Dear Dr. Dahlheim:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Director of Operations

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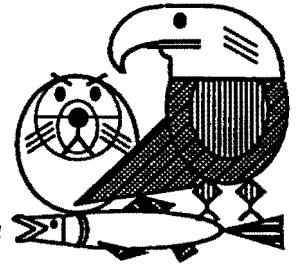
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Restoration Office

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Phone: (907) 278-8012 Fax: (907) 276-7178



---

March 11, 1994

Tracy Collier  
DOC/NOAA/NMFS  
Northwest Fisheries Science Center  
Environmental Conservation Division  
ML/E/207  
2725 Montlake Blvd E  
Seattle, Washington 98112-2097

Dear Dr. Collier:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Molly McCammon  
Director of Operations

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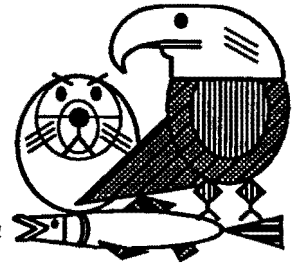
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Theo Matthews  
P.O. Box 389  
Kenai, Alaska 99611

Dear Mr. Matthews:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Molly McCammon  
Director of Operations

Attachment

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Trustee Agencies

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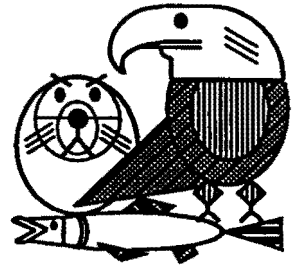
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Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Chip Treinen  
Area K Seiners  
18011 Goldenview Drive  
Anchorage, Alaska 99516

Dear Mr. Treinen:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Molly McCammon  
Director of Operations

Attachment

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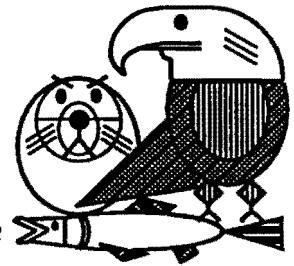
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Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Kathy Frost  
Alaska Department of Fish & Game  
1300 College Road  
Fairbanks, Alaska 99701-1599

Dear Ms. Frost:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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Molly McCammon  
Director of Operations

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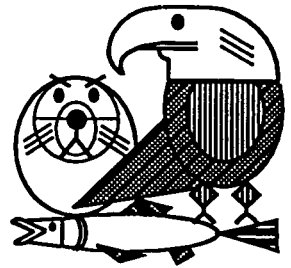
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Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

Phil Mundy  
Fisheries & Aquatic Sciences  
1015 Sher Lane  
Lake Oswego, Oregon 97034-6335

Dear Dr. Mundy:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the Draft Restoration Plan prepared by the Exxon Valdez Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The Exxon Valdez Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

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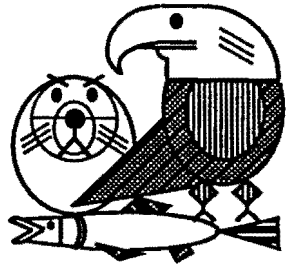
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March 11, 1994

The Honorable Jerome Selby  
Mayor of Kodiak  
710 Mill Bay Road  
Kodiak, Alaska 99615

The Honorable Jerome Selby:

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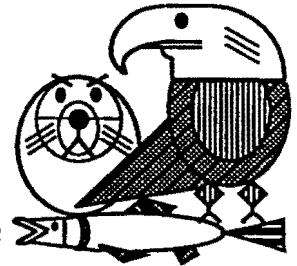
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March 11, 1994

Ken Hill  
Prince William Sound Science Center  
P.O. Box 1290  
Cordova, Alaska 99574

Dear Mr. Hill:

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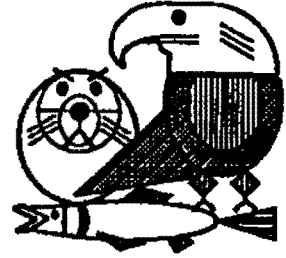
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# **Exxon Valdez Oil Spill Trustee Council**

**Restoration Office**

**645 "G" Street, Anchorage, AK 99501**

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



---

March 3, 1994

## **Meeting Notes January 13 & 14, 1994 Work Session on Ecosystem-based Management Structure**

**Mission Statement**

**Definitions**

**Guiding Principles**

**Injured Resources and Services, and Ecosystem**

**Goals and Objectives**

**Management Goals and Objectives**

**Attachment 1**

**Attachment 2**

**Attachment 3**

**Attachment 4**

**Attachment 5**

In January, we distributed draft notes and asked for review and suggestions. These revised notes include changes based on the suggestions we received. Some of the most important changes are: the Guiding Principles are grouped into categories for better communication and understanding, ecosystem definitions are provided for the three ecosystem types, and background information is provided that puts the goals and objectives into perspective.

ATTACHMENT 1

## MISSION STATEMENT

The mission of the Trustee Council and all participants in Council efforts is to efficiently restore the environment injured by the *Exxon Valdez* oil spill to a healthy, productive, world renown ecosystem, while taking into account the importance of the quality of life and the need for viable opportunities to establish and sustain a reasonable standard of living.

The restoration will be accomplished through the development and implementation of a comprehensive, interdisciplinary recovery and rehabilitation program that includes:

- Natural Recovery
- Monitoring and Research
- Resource and Service Restoration
- Habitat Acquisition and Protection
- Resource and Service Enhancement
- Replacement
- Meaningful Public Participation
- Project Evaluation
- Fiscal Accountability
- Efficient Administration

— adopted by the *Exxon Valdez* Oil Spill Trustee Council November 30, 1993

ATTACHMENT 2

**GOAL**

A mental concept of what you want.

**OBJECTIVE**

Pertaining to a material or measurable specific object (as distinguished from a mental concept).

**STRATEGY**

Activity or expenditure that is directed toward accomplishment of an objective (i.e., who, what, where, when, how).

**CATEGORY OF RESTORATION STRATEGY**

- Monitoring and Research
- Habitat Protection
- General Restoration

**STRATEGY TIMELINE AND COSTS**

ATTACHMENT 3

**GUIDING PRINCIPLES**

General Principles

1. Restoration should contribute to a healthy, productive and biologically diverse ecosystem within the spill area that supports the services necessary for the people who live in the area.
2. Restoration will take an ecosystem approach to better understand what factors control the populations of injured resources.

Principles that Focus on Direct Restoration Activities

3. Restoration will focus upon injured resources and services and will emphasize resources and services that have not recovered. Resources and services will be enhanced, as appropriate, to promote restoration. Restoration actions may address resources for which there was no documented injury if these activities will benefit an injured resource or service.
4. Resources and services not previously identified as injured may be considered for restoration if reasonable scientific or local knowledge obtained since the spill indicates a spill-related injury.
5. Projects designed to restore or enhance an injured service:
  - must have a sufficient relationship to an injured resource,
  - must benefit the same user group that was injured, and
  - should be compatible with the character and public uses of the area.
6. Restoration activities will occur primarily within the spill area. Limited restoration activities outside the spill area, but within Alaska, may be considered under the following conditions:
  - when the most effective restoration actions for an injured population are in a part of its range outside the spill area, or
  - when the information acquired from research and monitoring activities outside the spill area will be significant for restoration or understanding injuries within the spill area.

Principles Concerning Integration of Restoration Activities

7. Restoration will include a synthesis of findings and results, and will also provide an indication of important remaining issues or gaps in knowledge.
8. Restoration shall take advantage of cost sharing opportunities where effective.
9. Restoration should be guided and reevaluated as information is obtained from damage assessment studies and restoration actions.

Public Participation Principles

10. Restoration must include a meaningful public participation process at all levels — planning, project design, implementation and review.
11. Restoration must reflect public ownership of the process by timely release and reasonable access to information and data.

Principles concerning the Design of Restoration Projects

12. Proposed restoration strategies should state a clear, measurable and achievable end point.
13. Restoration must be conducted as efficiently as possible, reflecting a reasonable balance between costs and benefits.

Principles to Help Establish Priorities for Restoration Activities

14. Priority will be given to restoring injured resources and services which have economic, cultural and subsistence value to people living in the oil spill area, as long as this is consistent with other principles.
15. Possible negative effects on resources or services must be assessed in considering restoration projects.
16. Priority shall be given to strategies that involve multi-disciplinary, interagency or collaborative partnerships.
17. Restoration projects will be subject to open, independent scientific review before Trustee Council approval.
18. Past performance of the project team should be taken into consideration when making funding decisions on future restoration projects.
19. Competitive proposals for restoration projects will be encouraged.
20. Government agencies will be funded only for restoration projects that they would not have conducted had the spill not occurred.

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These Guiding Principles reflect and elaborate on the Policies identified in Chapter 2 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993). Further guidance regarding the categories of restoration action — General Restoration, Habitat Protection and Acquisition, Monitoring and Research, and Public Information and Administration — are provided in Chapter 3 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993).

Attachment 4

This attachment organizes information on injuries and restoration according to general ecosystem types within the spill area, identifies resources and services injured by the spill, and provides a statement of goals and objectives for those resources and services.

**Resources and services injured by the spill.** The list of injured resources and services is taken from Appendix B of the Draft Exxon Valdez Oil Spill Restoration Plan (November 1993). As a result of the January 13-14 work session, the information was modified by subdividing some resource categories:

- "mussels" was made its own category rather than being included in "intertidal organisms," and
- "intertidal ecosystem" and "subtidal ecosystem" were subdivided into "organisms" and "sediments."

In order to make the ecosystem context more apparent, each resource and service is shown according to where it exists in the ecosystem: pelagic (offshore), near-shore, or upland ecosystem.

**Goals.** Draft goals are provided for each of the three parts of the ecosystem.

**Objectives.** Objectives are statements that pertain to a measurable, specific object (as distinguished from a mental concept). They are given for each injured resource and service, and are taken from definitions of recovery in Chapter 4 of the Draft Restoration Plan.

**Ecosystem Definitions.** The three ecosystem types described below are not intended to have hard-and-fast, legally definable boundaries. Rather, they are intended to describe areas that generally contain similar biological and physical features that influence the relationships of the resources that exist there and the services they support.

***Pelagic Ecosystem.*** The deeper, open water region offshore that is not directly affected by wave action, terrestrial runoff, or other near-shore processes. Examples are the center of Prince William Sound and a few hundred yards beyond the steep cliffs and fiord mouths of the outer Kenai coast.

***Near-shore Ecosystem.*** Terrestrial and aquatic areas dominated by near-shore processes such as tidal movement, salt spray, intertidal and shoreline vegetation, wave action, and terrestrial runoff. Near-shore areas include the intertidal zone, salt marshes, and beach areas where salt and shoreline processes dominate, as well as shallower offshore waters that are greatly influenced by near-shore processes. It also includes narrow fjords and channels that occur in the spill area.

***Upland Ecosystem.*** The area of land and water uphill of the near-shore ecosystem.

**INJURED RESOURCE — ECOSYSTEM MATRIX**

	<b>ECOSYSTEM</b>		
	<u>Pelagic (Off-shore)</u>	<u>Near-shore</u>	<u>Upland</u>
Harbor seal	X	X	
Sea otter		X	
Killer whale	X		
Sockeye salmon	X	X	X
Cutthroat trout		X	X
Dolly Varden		X	X
Rockfish	X	X	
Pacific herring	X	X	
Pink salmon	X	X	X
Common murre	X	X	
Harlequin duck		X	X
Marbled murrelet	X	X	X
Pigeon guillemot		X	
Bald eagle		X	X
Black oystercatcher		X	X
River otter		X	X
Clams		X	
Mussels		X	
Intertidal organisms		X	
Subtidal organisms	X	X	
Sediments	X	X	
<u>Other Resources</u>			
Archeological Resources		X	X
Designated Wilderness		X	X

ATTACHMENT 4 (continued)

**INJURED RESOURCES**

**Pelagic (Off-shore) Ecosystem**

Sockeye salmon  
Pink salmon  
Pacific herring  
Rockfish  
Killer whale  
Harbor seal

Common murre  
Marbled murrelet  
  
Subtidal organisms  
Sediments

**Near-shore Ecosystem**

Sockeye salmon  
Pink salmon  
Cutthroat trout  
Dolly Varden  
Pacific herring  
Harbor seal  
Sea otter  
Clams  
Mussels  
Pigeon guillemot  
Rockfish

Bald eagle  
Harlequin duck  
Black oystercatcher  
River otter  
Intertidal organisms

Subtidal organisms

Marbled murrelet  
Sediments  
Common murre

Archaeologic resources

Designated wilderness areas

**Upland Ecosystem**

Sockeye salmon  
Pink salmon  
Cutthroat trout  
Dolly Varden

Harlequin duck  
Marbled murrelet

Bald eagle  
Black oystercatcher

River otter

Archeological resources

Designated wilderness areas

**LOST OR REDUCED SERVICES**

Commercial fishing  
Recreation/Tourism

Passive uses  
Subsistence

## GOALS

**Pelagic (Off-shore) Ecosystem:** A healthy, productive, pelagic (off-shore) ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

**Near-shore Ecosystem:** A healthy, productive, near-shore ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

**Upland Ecosystem:** A healthy, productive, upland ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

## OBJECTIVES

(In the table below, the first column shows the ecosystem to which the objective applies: P=pelagic (off-shore) ecosystem, N=near-shore ecosystem, and U=upland ecosystem.)

The overall goal of restoration is recovery of all injured resources and services. Ecosystem goals are described above. This section defines objectives as measures of recovery to meet the overall restoration goal and ecosystem goals. For some resources, little is known about the extent of injury and recovery, so it is difficult to define recovery or develop restoration strategies.

In general, resources and services will have recovered when they return to conditions that would have existed had the spill not occurred. Because it is difficult to predict conditions that would have existed in the absence of the spill, recovery is often defined as a return to prespill conditions. For resources that were in decline before the spill, like marbled murrelets, recovery may consist of stabilizing the population at a lower level than before the spill.

Where little prespill data exists, injury is inferred from comparison 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 for recovery based on these differences are often less certain than in those cases where prespill data exist. However, there can also be some uncertainty associated with interpreting the significance of prespill population data since populations undergo natural fluctuations. 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.

## Natural Resources

- N, U     **Bald Eagle:** Bald eagle population and productivity comparable to prespill levels.
  
- N, U     **Black Oystercatchers:** Populations that attain pre-spill levels, and reproduction and growth rates in oiled areas that are comparable to those in unoiled areas.
  
- N         **Clam:** Clam populations and productivity that are at prespill levels.
  
- P, N     **Common Murre:** Prespill populations and fledgling productivity of common murrees at all injured colonies.
  
- P, N, U   **Cutthroat Trout and Dolly Varden Trout:** Growth rates and survival for cutthroat trout and Dolly Varden trout within oiled areas that are comparable to those for unoiled areas.
  
- N, U     **Harbor Seal:** Population trends in harbor seals that are stable or increasing.
  
- N, U     **Harlequin Ducks:** For harlequin ducks, prespill populations or when differences between oiled and unoiled areas are eliminated.
  
- N         **Intertidal Organisms:** For each intertidal elevation (lower, middle, and upper), community composition, age class distribution, population abundance of component species, and ecosystem functions and services at levels that would have prevailed in the absence of the oil spill.
  
- P         **Killer Whale:** Recovery of the injured AB killer whale pod to the 1988 level (of 36 individuals).
  
- P, N, U   **Marbled Murrelet:** Population trends in marbled murrelets that are stable or increasing.
  
- N         **Mussel:** Mussel populations and productivity which are at prespill levels, and which do not contain oil that contaminates higher trophic levels.
  
- P, N     **Pacific Herring:** Populations of pacific herring that are healthy and productive and exist at prespill abundances.
  
- P, N     **Pigeon Guillemot:** Population trends in pigeon guillemots that are stable or increasing.
  
- P, N, U   **Pink Salmon:** Populations of pink salmon that are healthy and productive and exist at prespill abundances. (An indication of recovery is when egg mortalities in oiled areas match prespill levels or levels in unoiled areas.)

- N, U     **River Otters:** For river otters, population levels are unknown but indications of recovery are when use and physiological indices have returned to prespill conditions.
  
- P         **Rockfish:** Populations of rockfish levels are unknown, but indications of recovery are when habitat use and physiological indices have returned to prespill conditions.
  
- N, U     **Sea Otter:** A population abundance and distribution of sea otters comparable to prespill abundance and distribution, and when all ages appear healthy.
  
- P, N     **Sediments:** Sediments whose contamination, if any, causes no negative effects to the spill-affected ecosystem.
  
- P, N, U   **Sockeye Salmon (Kenai River):** Population of sockeye salmon (Kenai River) that is healthy, and productive and exists at prespill levels. (One indication of recovery is when Kenai and Skilak Lakes support sockeye smolt outmigrations comparable to prespill levels.)
  
- P, N, U   **Sockeye Salmon (Red Lake):** Population of sockeye salmon (Red Lake) that is healthy, productive, and exists at prespill levels in Red Lake.
  
- P, N     **Subtidal Organisms:** For subtidal organisms, community composition, population abundance and age distribution of component species, and ecosystem functions and services in each injured subtidal habitat that have returned to levels that would have prevailed in the absence of the oil spill.

### Other Resources

- N, U     **Archaeological Resources:** For archaeological resources, an end to spill-related injury including looting and vandalism rates that are at or below prespill levels.
  
- N, U     **Designated Wilderness Areas:** Designated wilderness areas where oil is no longer encountered, and when the public perceives them to be recovered from the spill.

### Services

**Subsistence:** Subsistence resources that are healthy and productive and exist at prespill levels, and people that are confident that the resources are safe to eat. (One indication that recovery has occurred is when the cultural values provided by gathering, preparing, and sharing food are reintegrated into community life.)

**Commercial Fishing:** 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.

**Recreation and Tourism:** Recreation and tourism fish and wildlife resources that are recovered; recreation use of oiled beaches that is no longer impaired, and management capabilities and facilities that can accommodate spill-related changes in human use.

**Passive Use:** A public that perceives that aesthetic and intrinsic values associated with the spill area are no longer diminished by the oil spill.

Attachment #5

## **MANAGEMENT PROCESSES**

This attachment lists a goal and four objectives for management processes.

### **GOAL**

A long-term, comprehensive and cost-effective restoration program comprised of integrated strategies that are a balanced combination of Monitoring and Research, Habitat Protection and General Restoration.

### **OBJECTIVES**

**Administration:** Administrative costs that average no more than five percent of overall restoration expenditures over the remainder of the settlement period.

**Integrated Research and Monitoring :** A research and monitoring program that coordinates project development and design with goals and objectives; appropriately reflects and addresses ecosystem relationships; and ensures that collected data will be readily available and accessible to resource managers, policy makers and the general public.

**Information Management:** Information that is available in a timely manner and useable format to scientists, managers and the public.

**Communication:** A public involvement program that provides information and an opportunity for meaningful involvement in all levels of restoration — planning, project design, implementation, and review.

These people get the InvMar11.wp letter

Phil Mundy, peer reviewer  
Kathy Frost, USF&WS (?)  
Jeff Short, NOAA  
Marilyn Dahlheim, NOAA  
Tracy Collier, NOAA

Donald M. Schell  
Director, Institute of Marine Science  
University of Alaska, Fairbanks  
Fairbanks, Alaska 99775

Chip Treinen  
Area K Seiners  
18011 Goldenview Dr  
Anchorage, Ak 99516

These people get the Invdesig.wp Letter

Ken Hill, Chair  
Prince William Sound Science Center  
P.O. Box 1290  
Cordova, Alaska 99574

The Honorable Jerome Selby  
Kodiak Borough Mayor

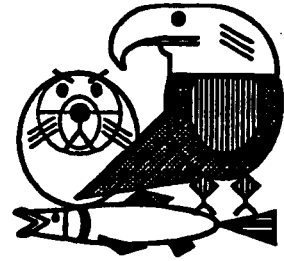
Theo Matthews  
P.O. Box 389  
Kovai 99611

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



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March 11, 1994

Address goes here

Dear ??????:

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the *Draft Restoration Plan* prepared by the *Exxon Valdez* Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The *Exxon Valdez* Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

As with the first discussion, the meeting will occur in the *Exxon Valdez* Oil Spill Restoration Office, 4th floor large conference room, 645 G Street, Anchorage, and will begin at 8:30 A.M. This work session will continue the effort begun in January, but it will focus on applying the conclusions reached at the first meeting to the 1995 Work Plan process. We expect the first day to focus mostly on issues related to the work plan process.

I am including two attachments. The first attachment is a revised set of notes from the January work session. The revisions were based on comments received on the draft notes distributed after the meeting.

Next week we will send out a more complete description of the draft work plan process for your review, and an agenda for the meeting. Please contact Rebecca Williams at 278-012 if you will be able to attend this session. I look forward to your participation.

Sincerely,

Molly McCammon  
Director of Operations

Attachment

*For  
Rebecca  
Williams*

DR TRACY COLLIER F/NWC2  
DOC/NOAA/NMFS  
NORTHWEST FISHERIES SCIENCE CENTER  
ENVIRONMENTAL CONSERVATION DIVISION  
ML/E/207  
2725 MONTLAKE BLVD E  
SEATTLE WA 98112-2097

PHONE (206) 860-3312  
FAX (206) 860-3335

DR MARILYN DAHLHEIM  
NOAA / ALASKA FISHERIES SCIENCE CENTER  
NATIONAL MARINE MAMMAL LABORTORY  
7600 SAND POINT WAY NE  
BIN C15700 BLDG 3  
SEATTLE, WA 98115-0070

PHONE (206) 526-4020  
FAX (206) 526-6615

JEFFREY SHORT  
NOAA/NATIONAL MARINE FISHERIES  
AUKE BAY LABORATORY  
11305 GLACIER HIGHWAY  
JUNEAU AK 99801-8626

PHONE (907) 789-6065  
FAX (907) 789-6094

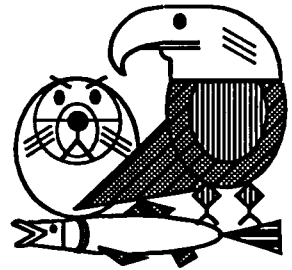
# Exxon Valdez Oil Spill Trustee Council

Restoration Office

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


Phone: (907) 278-8012 Fax: (907) 276-7178

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## MEMORANDUM

To: Restoration Work Force

From: Molly McCammon   
Director of Operations

Date: March 11, 1994

Subj: Wednesday Staff Meetings

As discussed on March 8, in Juneau, Jim and I will meet with the Restoration Work Force every Wednesday at 9:00 a.m. via teleconference. The Anchorage location will be the 4th floor conference room in the Simpson Building. The Juneau location will be the Forest Service conference room on the 5th floor except the following dates when the meetings will be at NMFS in room 413:

March 23 (no meeting)  
March 30  
April 6  
April 20  
April 27  
June 1  
September 14

cc: Jim Ayers  
June Sinclair  
Eric Myers

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Trustee Agencies

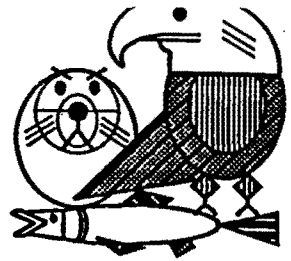
State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture, and Interior

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



TO: Jerome Montague/ADF&G  
FROM: Jim Ayers, Executive Director *Jim Ayers*  
DATE: 3/11/94  
SUBJ: Project #94191 (Egg/Alevin Mortality) — Authorization

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The purpose of this memorandum is to authorize work to proceed on Project #94191 (Egg/Alevin Mortality) regarding the spring portion of the project pertaining to field sampling.

It is my understanding that the Chief Scientist has reviewed this portion of the project and that it is essentially identical to last years work and, as such, was subject to peer review previously. It is also my understanding that the laboratory portions of the project FY 94 DPD are under expedited review and that the Chief Scientist will be providing further recommendations regarding this portion of the project in the near future.

cc: Joe Sullivan/ADF&G  
Bob Spies

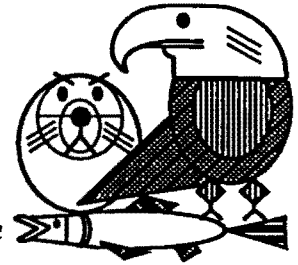
# Exxon Valdez Oil Spill Trustee Council

Restoration Office

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

Phone: (907) 278-8012 Fax: (907) 276-7178

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March 11, 1994

Stephen C. Planchon  
Director of Conservation Programs  
The Nature Conservancy of Alaska  
601 West 5th Avenue  
Anchorage, Alaska 99501

Dear Steve:

Jim Ayers asked me to respond to your letter of January 28, 1994 concerning the Biological Survey Strategy Cooperative Agreement. As you pointed out in your letter, Trustee Council staff are initiating a strategic planning process and reassessing our needs for database and information management.

We sincerely appreciate the work that you and others put into this project last fall, and can well understand your frustration with not having a clear direction at that time. We are currently reviewing our internal needs, but as we begin to look outwards, we would appreciate your ideas and suggestions. We also agree that if a proposal is resubmitted, work completed on the original project could be applied toward the matching requirements.

Again, thank you for all the help you and other members of The Nature Conservancy staff have provided the Trustee Council. We hope you will continue to be involved in our development of a Management Implementation Strategy, with the next work session scheduled for March 21.

Sincerely,

A handwritten signature in cursive script, reading "Molly McCammon".

Molly McCammon  
Director of Operations

---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture, and Interior



January 28, 1994

Jim Ayers, Executive Director  
Exxon Valdez Oil Spill Trustee Council  
Restoration Office  
645 "G" Street, Suite 402  
Anchorage, AK 99501

Re: TNC/ADF&G Biological Survey Strategy Cooperative Agreement

Dear Jim:

At the September 17, 1993, Trustee Council meeting, then-Attorney General Charlie Cole and Undersecretary George Frampton requested that The Nature Conservancy assist the Trustee Council in developing a strategy for a biological survey of the Exxon Valdez oil spill area. The Trustee Council authorized \$25,000 for the project.

Since specific goals and objectives for the project were not provided by the Trustee Council, we spent a great deal of time working with Trustee Council agencies in an attempt to define the scope of the Conservancy project, as well as its relationship to the Prince William Sound Fisheries Ecosystem Research Planning Group project (also authorized at the same Trustee meeting last September). Working together we were not able to develop a clear understanding of what was expected by all involved parties.

Recent efforts on your part will undoubtedly result in a better definition of goals and objectives for restoration plan implementation, including those associated with biological survey and information management needs. Rather than continue efforts on the project as originally authorized by the Trustee Council, it seems appropriate that the Conservancy await the completion of your strategic planning process. Then, if requested, the Conservancy may resubmit a project proposal which addresses agreed-upon implementation goals and objectives.

If a proposal is resubmitted it would be greatly appreciated if work completed on the original project could be applied towards the matching requirements, if any, of the subsequent project.

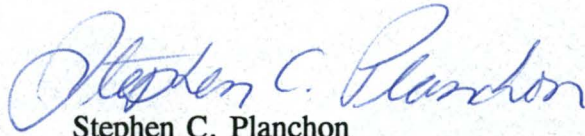
601 West Fifth Avenue, Suite 550 • Anchorage, Alaska 99501-2226  
Telephone (907) 276-3133 • Fax (907) 276-2584

International Headquarters: 1815 North Lynn Street, Arlington, Virginia 22209



Please advise me whether the recommendation described above is acceptable to you.

Sincerely,



Stephen C. Planchon  
Director of Conservation Programs

cc: Susan Ruddy  
Ed Backus  
Craig Groves  
Randy Hagenstein  
Joe Jacob  
Judy Sherburne

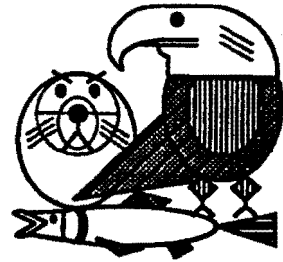
# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178

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March 16, 1994

Mr. Stephen C. Planchon  
Director of Conservation Programs  
The Nature Conservancy of Alaska  
601 West 5th Avenue  
Anchorage, AK 99501

Dear Steve:

Thank you for your letter of January 28, 1994 concerning the Biological Survey Strategy Cooperative Agreement. As you pointed out in your letter, Trustee Council staff are in the process of initiating a strategic planning process and reassessing our needs for database and information management.

I sincerely appreciate the work that you and others put into this project last fall. We are currently in the process of assessing our internal needs and process for integrated research. I would appreciate your ideas and suggestions. I also agree that if a proposal is resubmitted, work completed on the original project could be applied toward the matching requirements.

Again, thank you for all the help you and other members of the Nature Conservancy staff have provided the Trustee Council. I hope you will continue to be involved in our development of a Management Implementation Strategy. As I mentioned to you, the next work session is scheduled for March 21, and you should be receiving backup materials very soon.

Sincerely,

  
James R. Ayers  
Executive Director

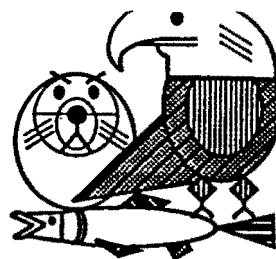
JRA/mir

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

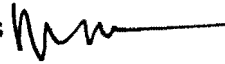
645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## FAX COVER

TO: Maria Lisowski

FROM: Molly McCammon/Director of Operations 

DATE: 3/11/94

SUBJ: Revisions to Project #94320/Hatchery Manipulation DPD

NUMBER OF PAGES 3 (including cover)

As a result of our discussions earlier this week regarding the Detailed Project Description (DPD) for the Hatchery Manipulation portion of Project #94320 (PWS System Investigation), please find enclosed draft revisions to the Objectives of the DPD. (Note: Only a single page of revisions is attached that reflects changes to the Objectives portion of the DPD. A copy of the prior Objectives is also attached for comparison.)

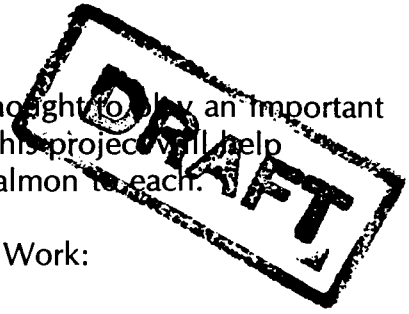
In particular, please note that Objectives A and B have been rewritten and that former Objective F has been deleted to more clearly reflect that this hatchery manipulation project would:

- 1) take place in a specific year (1994); and
- 2) that the hatchery manipulation project will, as part of the PWS System Investigation effort, provide further information to aid in understanding hatchery and wild stock interactions.

Please let me know if these changes are responsive to your concerns.

Thank you.

growth rate and mortality. In addition, pink salmon are thought to play an important role in the survival of other fishes, birds and mammals. This project will help identify those other species and the importance of pink salmon to each.



2. Relation to Other Damage Assessment/Restoration Work:

This project is integral to the SEA program research planned for 1994. Further, this project has been identified as a necessary component of any ecosystem based research in PWS. Included in this project is the continuation of a spring time macro-zooplankton sampling program at each salmon hatchery. This program will compliment the SEA program research by continuing a 12 year long database that is crucial to understanding pink salmon population dynamics.

3. Objectives:

The goal of this project is, through collaboration with the SEA program, to assist "to develop an ecosystem level understanding of the natural and man-caused factors influencing the production of pink salmon...in PWS". Specific objectives are:

- A. Provide SEA researchers, in 1994, with the tools needed to determine the effect of ocean-entry timing, ocean entry location, and fry size on losses to predators.
- B. Provide, in 1994, through the hatchery release of pink salmon fry, support necessary to conduct Prince William Sound ecosystem investigations that will provide further information that will aid in understanding hatchery and wild stock interactions.
- C. Provide SEA researchers with the tools needed to determine the migratory path of pink salmon fry in PWS.
- D. Monitor macrozooplankton abundance, ocean temperature, and meteorological conditions at three hatcheries in PWS.
- E. Coded wire tag and release 1,000,000 hatchery pink salmon fry.

4. Methods:

Approximately 411 million pink salmon eggs will be taken at three hatchery locations in PWS in the fall of 1993. Eggtake estimates by facility are as follows: 1) 126 million eggs for the Armin F. Koernig (AFK) hatchery on Evans Island in southwest PWS, 2) 180 million eggs for the Wally Noerenberg Hatchery (WNH) on Esther Island in northwest PWS, 3) 105 million eggs for the Cannery Creek Hatchery (CCH) in Unakwik inlet in northern PWS. Eggs are taken from brood stock returning to each facility.

The goal of this project is, through collaboration with the SEA program, to assist "to develop an ecosystem level understanding of the natural and man-caused factors influencing the production of pink salmon...in PWS". Specific objectives are:

- A. Continue hatchery production of pink salmon in 1994 and support the SEA ecosystem research through coordination of fry releases with SEA sampling efforts.
- B. Provide SEA researchers with the tools needed to determine the effect of ocean-entry timing, ocean entry location, and fry size on losses to predators.
- C. Provide SEA researchers with the tools needed to determine the migratory path of pink salmon fry in PWS.
- D. Monitor macrozooplankton abundance, ocean temperature, and meteorological conditions at three hatcheries in PWS.
- E. Coded wire tag and release 1,000,000 hatchery pink salmon fry.
- F. Using data from the 1994 SEA sampling of hatchery pink salmon fry, collaborate with SEA researchers and regional salmon enhancement planners to identify future experimental releases that address SEA hypotheses.

#### 4. Methods:

Approximately 411 million pink salmon eggs will be taken at three hatchery locations in PWS in the fall of 1993. Eggtake estimates by facility are as follows: 1) 126 million eggs for the Armin F. Koernig (AFK) hatchery on Evans Island in southwest PWS, 2) 180 million eggs for the Wally Noerenberg Hatchery (WNH) on Esther Island in northwest PWS, 3) 105 million eggs for the Cannery Creek Hatchery (CCH) in Unakwik inlet in northern PWS. Eggs are taken from brood stock returning to each facility.

All pink salmon eggs will be incubated at their respective hatcheries in aluminum egg boxes with a loading density of approximately 305,000 eggs per box. Eggs will be monitored throughout the fall and winter to assure a clean incubation environment is maintained. This involves continual monitoring of water quality parameters such as dissolved oxygen, pH, total water hardness, and ammonia as well as adjustment to water flow. Removal of dead eggs is important to prevent fungal growth within the incubators and is done prior to hatch with forceps or by hand. Periodic "venting" of incubators is required to purge air bubbles that build up below the perforated plate and prevent adequate water flow to the eggs. Newly hatched pink salmon fry (Alevins) exist in the incubators, feeding off their yolk sac, until early to mid March.

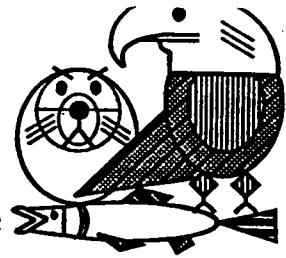
By mid March, 0.23 gram pink salmon fry begin exiting the incubators volitionally and are carried, via gravity flow, through plastic plumbing and a bank of electronic fry counters. Following enumeration, the pink fry are conveyed via flex hose to 12m X 12m X 3m (450m<sup>3</sup>) saltwater rearing pens. Fry loading density per saltwater pen varies by location, ranging from 7,000,000 fry to 12,500,000 fry

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



March 11, 1994

James R. Scott, D.V.M.  
Bird Treatment and Learning Center  
P.O. Box 230496  
Anchorage, Alaska 99523

Dear Dr. Scott,

I want to take this opportunity to respond to your letter regarding efforts to obtain funding for the Bird Treatment and Learning Center (Bird TLC) to construct a nature center and related facilities adjacent to Potters Marsh. I have heard from a number of people about this project and appreciate the great efforts you have been making to develop a facility to carry forward with the work of the Bird TLC.

As a starting point, I want to provide some basic background information on the *Exxon Valdez* oil spill Civil Settlement, the Restoration Fund established by the settlement, and the legal framework that governs Trustee Council actions. As you are perhaps aware, the joint federal-state civil settlement was adopted under the Federal Water Pollution Control Act which provides the legal authority for the civil settlement. The civil settlement includes two documents: the first is a Consent Decree between Exxon and the State of Alaska and the United States that requires Exxon to pay \$900 million to the State and federal governments. The second is a Memorandum of Agreement between the State of Alaska and the federal government that provides the basic rules for expenditure of the restoration funds.

The rules in the Memorandum of Agreement include that:

- Restoration funds must be used "... for the purposes of restoring, replacing, enhancing, or acquiring the equivalent of natural resources injured as a result of the oil spill and the lost or reduced services provided by such resources...."
- Restoration funds must be spent on restoration of natural resources in Alaska unless the Trustees unanimously agree that spending funds outside of the state is necessary for effective restoration.

- All decisions made by the Trustees (such as spending restoration funds) must be made by unanimous consent.

In November 1993, the Trustee Council published a *Draft Restoration Plan*. This draft plan was prepared to provide long-term guidance for restoring the resources and services injured by the oil spill. The plan contains policies to guide the Trustee Council as it makes restoration decisions and describes how restoration activities will be implemented. A copy of the *Draft Restoration Plan* is enclosed.

As you will note, the *Draft Restoration Plan* itself provides long-term guidance; it does not identify individual restoration projects. Rather, each year, restoration activities are implemented through an annual work plan (projects funded as part of the 1992 and 1993 work plans are identified in Appendix A). To be funded, work plan projects must be consistent with the rules for use of the restoration fund (i.e., permissible under the terms of the Consent Decree and the Memorandum of Agreement) as well as consistent with the policies, objectives and restoration strategies of the restoration plan.

Chapter 2 of the *Draft Restoration Plan* describes policies that the Trustee Council uses to guide restoration activities. Chapter 3 describes the four Categories of Restoration Actions that comprise the restoration program together with a discussion of how decisions are made about projects and presents policies that apply to each category. Chapter 4 identifies the specific resources and services that are recognized as having experienced injury and the recovery objectives that have been identified for each resource or service. (Table B-1 from the *Draft Restoration Plan* Appendix B, attached to this letter, lists the various injured resources and services and their status of injury as of November 1993).

With respect to the annual work plan timeline, the Trustee Council operates on the federal fiscal year (October 1 - September 30). We are just now in the initial stages of formulating a work plan process for next year that contemplates the Trustee Council approving a work plan for FY 95 next fall (although the Trustee Council can, in its discretion, take up any proposal at any time).

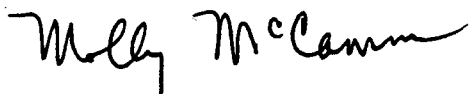
I would encourage you to review the *Draft Restoration Plan* for more detailed guidance as it relates to the specific details of the Bird TLC project. A careful examination of the policy guidance provided by the *Draft Restoration Plan* would be a critical starting point for anyone interested in advancing a particular project proposal. As you consider the Bird TLC project in light of these policies, it is particularly important to focus on the question of what clear linkage there is between the proposed project and the restoration of specific injured resources and/or services (i.e., all expenditure of settlement funds must be linked to specific injured resources and services). Also, the

status of recovery of any injured resource or service that would benefit from the particular project is an important consideration when evaluating a project proposal (i.e., restoration activities will emphasize resources and/or services that are not recovering).

I hope this brief explanation and the enclosed material provide you with a better understanding of the Trustee Council restoration process. If you would like additional information, or would like to further discuss the kinds of projects that the Trustee Council has funded in the past, perhaps we could meet to review the Bird TLC project proposal with some assistance from the Department of Law regarding questions of the Bird TLC project's eligibility under the terms of the civil settlement.

If I can be of further assistance, please let me know, or contact Eric Myers, Restoration Project Coordinator here at the Anchorage Restoration Office.

Sincerely,



Molly McCammon  
Director of Operations

enclosures:

*Draft Restoration Plan* (November 1993)  
Table B-1

cc: Jim Ayers  
Jerome Montague/ADF&G  
Nancy Tankersly/ADF&G  
Eric Myers

**Table B-1 List of Injured Resources and Lost or Reduced Services**

INJURED RESOURCES			LOST OR REDUCED SERVICES (Human Uses)
BIOLOGICAL RESOURCES		OTHER	
Recovering Bald eagle Black oystercatcher Intertidal organisms (some) Killer whale Sockeye salmon (Red Lake) Subtidal organisms (some)	Not Recovering Common murre Harbor seal Harlequin duck Intertidal organisms (some) Marbled murrelet Pacific herring Pigeon guillemot Pink salmon Sea otter Sockeye salmon (Kenai River) Subtidal organisms (some)	Archaeological resources Designated Wilderness Areas	Commercial fishing Passive uses Recreation and Tourism including sport fishing, sport hunting, and other recreation uses Subsistence
Recovery Unknown Clams Cutthroat trout Dolly Varden River otter Rockfish			

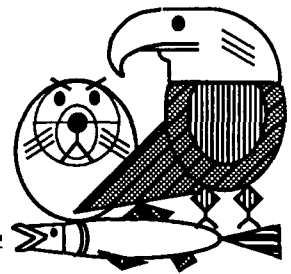
# **Exxon Valdez Oil Spill Trustee Council**

**Restoration Office**

**645 G Street, Suite 402, Anchorage, Alaska 99501**

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

---



## **MEMORANDUM**

**To:** Distribution

**From:** James R. Ayers  
Executive Director

**Date:** March 10, 1994

**Subj:** Up Coming Meeting

A meeting of Trustee Agency negotiators has been scheduled for March 15 in the Simpson Building at 9:00 a.m. The discussions will include the present status of habitat protection activities and where we intend to go. If you have any questions, please call either Dave Gibbons or myself. See you Tuesday.

---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

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\*\*\* ACTIVITY REPORT \*\*\*  
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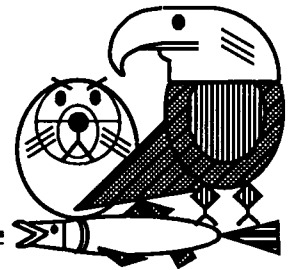
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501-3451

Phone: (907) 278-8012 Fax: (907) 276-7178



## FAX COVER SHEET

Page Maker

To: \_\_\_\_\_ Number: \_\_\_\_\_

From: Jim Ayers Date: 3-10-94

Comments: \_\_\_\_\_ Total Pages: 2

Please distribute to those individuals listed below that are in your office.

X Dawe Gibbons 586-7555 Mark Kuwada 349-1723

X Rich Groossens 586-7843 Alex Swiderski 278-7022

X John Harmening " X J. Ayers

X Judy Robinson 561-5807

X Dennis Lattery "

X Chuck Gilbert 257-2510

X Norman Lee "

X Barry Roth 202-208-3877

X Tom Gerlach 786-3635

X Bob Rice "

X Glenn Ellison 786-3625

X Dee Butler 786-3635

X Bob Putz 304-876-0739

### Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

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\*\*\* ACTIVITY REPORT \*\*\*  
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**AGENDA****Work Force Meeting****March 9, 1994 - 10:00 AM**

1. Report on D.C. Trip - Ayers
2. Housekeeping Issues - McCammon
  - Weekly Meetings/Updates
  - Leave Schedule
  - Other
3. 5th Anniversary of Spill - McCammon
  - March 22, 1994, Forum
  - 1994 Status Report
4. 1994 Work Plan
  - Status of NEPA Projects - Loeffler
  - Project 199 - IMS - McCammon
  - Project 320 - McCammon/Myers
  - Court Request - Brodersen
5. Update on Habitat Activities - Ayers
6. Administration Items - Sinclair
7. Restoration Plan
  - EIS - Gibbons
  - Implementation Management Structure - Myers/Loeffler
  - Timeline
  - FY 94 Work Plan - Myers/Loeffler
8. Agenda for next Trustee Meeting

Rebecca/Tami -  
Please give to  
folks involved in  
teleconference

Thanks,  
Eric

to Spies / Group in Conference  
Ran

## Implementation Management Structure

From Molly

The Implementation Management Structure is an Appendix to the *Draft Restoration Plan*. We are hoping that a draft will be available for Trustee Council review by mid-April. It will be distributed with the *Draft Restoration Plan* and *Draft EIS* in June.

The outline below shows the status of individual parts. A draft will be distributed to all work force members to review before it is distributed to Council members or the general public.

### Draft Outline

Mission Statement

Ecosystem 101 (Narrative)

Ecosystem Graphic

Guiding Principles

Goals/Objectives

### Status

Done

NBS, Leslie Holland-Bartels

Being drafted (Debbie Dubac)

Done

Done

### Injured Resource & Svc Strategies:

Recovery Monitoring

Research & General Rest.

Hab Protection

Byron (lead), others

Alex W (lead), others

Hab. Work Group

### Organizational Structure

Interdis. team & up (SRB) Mark B.

Interdis. team & down Alex W.

### Attachment: Outline for Proposer Guidance Packet

The attached outline was distributed on 2/24 for work force review. It is a distillation of the information being prepared for the Implementation Management Structure. A number of comments on the outline indicated that it should be shortened and prepared to be easy for the general public to read. A copy of the packet (possibly shortened from the attached outline) will be distributed to the Work Force to review in early April.

**DRAFT**

DRAFT 2/24/94

PROPOSAL GUIDANCE PACKET

- 1.0 Introduction (~ 3-4 pgs)
  - 1.1 Background
    - (history: how Settlement came to be/Consent Decree)
    - (basic financial info, Restoration Reserve)
    - (overall context: R&M, Gen Rest, Hab Protect - graphic)
  - 1.2 FY 95 Work Plan Schedule (brief)
- 2.0 Exxon Valdez Oil Spill Restoration Update (~ 6-8 pgs)
  - (adapted from 5th Anniversary Public Forum presentation)
- 3.0 Restoration Goals and Objectives (~ 5 pgs)
  - (include matrix: Upland/Nearshore/Pelagic)
- 4.0 FY 95 Work Plan Process (~ 10-15 pgs)
  - 4.1 Introduction
  - 4.2 Principles to Guide Development of FY 95 Work Plan
    - 4.2.1 Guiding Principles (#1-20)
    - 4.2.2 Approaches to Restoration
      - (include Table B-1 showing injury status)
      - Injured Biological Resources
        - Biological Resources That Are Recovering
        - Biological Resources That Are Not Recovering
        - Biological Resources With Recovery Unknown
      - Other Injured Natural Resources
        - Archeological Resources
        - Designated Wilderness
      - Lost or Reduced Services
        - Commercial Fishing
        - Subsistence
        - Recreation and Tourism
        - Passive Uses
- 5.0 FY 95 Proposal Evaluation Process
  - 5.1 Evaluation Criteria
  - 5.2 Timeline for Proposal Review and Evaluation

Appendices

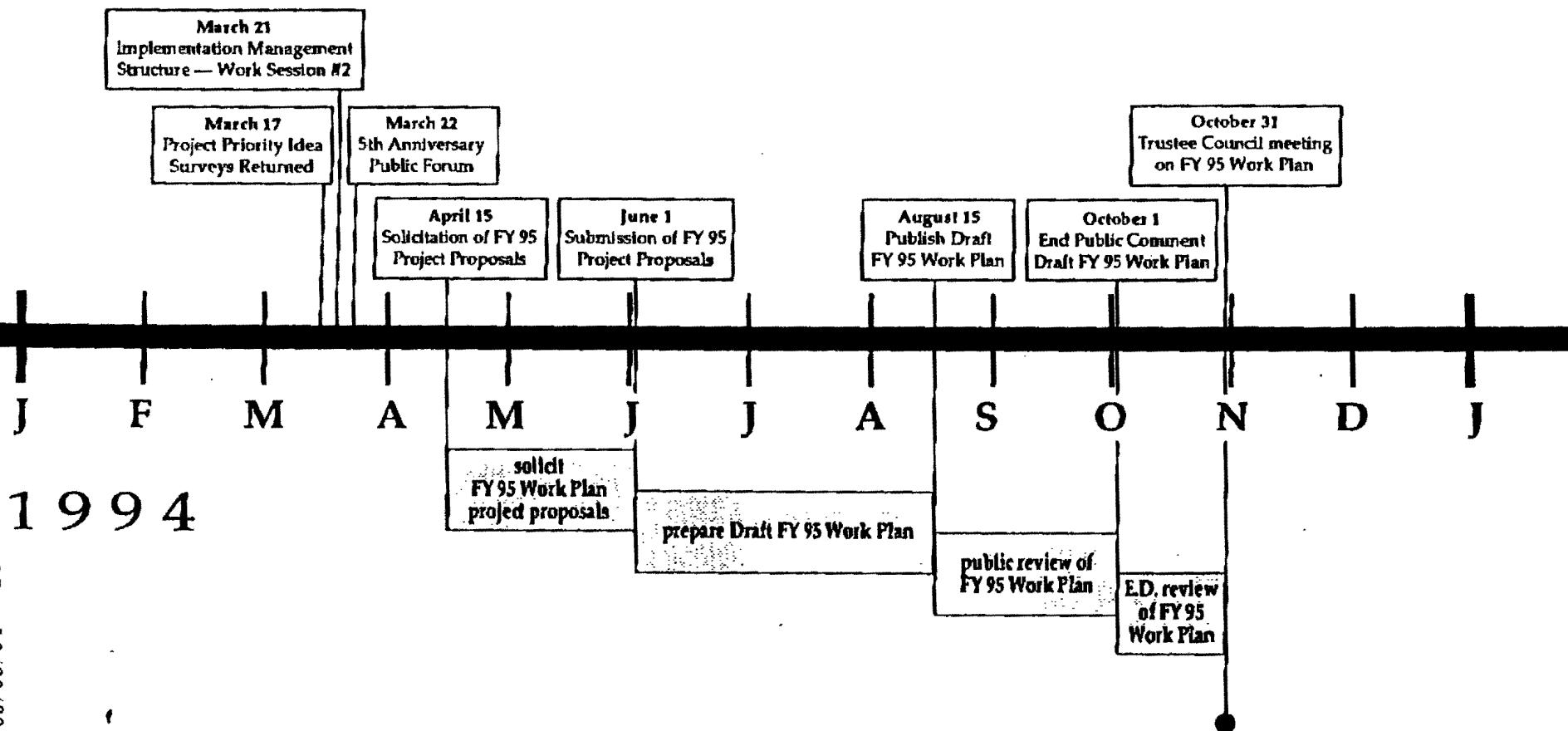
- A. Draft Restoration Plan
- B. Project Status Reports (92/93/94)
- C. Proposal Content and Format

**DRAFT**

# TIMELINE

## FY 95 Work Plan Development Process

March 1	Deadline: Comment from Restoration Work Force/FY 95 Priority Project Survey
March 3	Distribution of FY 95 Project Priority Idea Survey
March 9	Restoration Work Force meeting on FY 95 Work Plan Process (teleconference)
March 17	Deadline: FY 95 Project Priority Idea Surveys returned to Restoration Office
March 21	Implementation Management Structure work session #2
March 22	5th Anniversary Public Forum
March 23	Work session w/ Chief Scientist, others re: FY 95 Priority Projects (tentative)
April 15	Distribution of FY 95 Proposal Guidance Packet
June 1	Deadline: Submission of FY 95 project proposals
June 1 - Aug 15	Prepare Draft FY 95 Work Plan
Aug 15	Publish Draft FY 95 Work Plan
Aug 15 - Oct 1	Public comment/PAG review/Chief Scientist recommendation on FY 95 projects
Oct 1 - Oct 30	Development of Executive Director recommendation on FY 95 Work Plan
Oct 31	Trustee Council action on FY 95 Work Plan

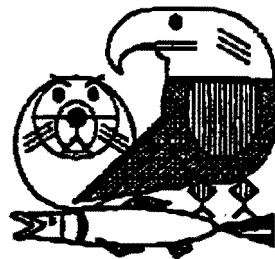


# Exxon Valdez Oil Spill Trustee Council

## Restoration Office

645 "G" Street, Anchorage, AK 99501

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



# FAX COVER SHEET

TO: REBECCA/TAMMY	FROM: ERIC
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PHONE NUMBER:	PHONE NUMBER: 586-7238

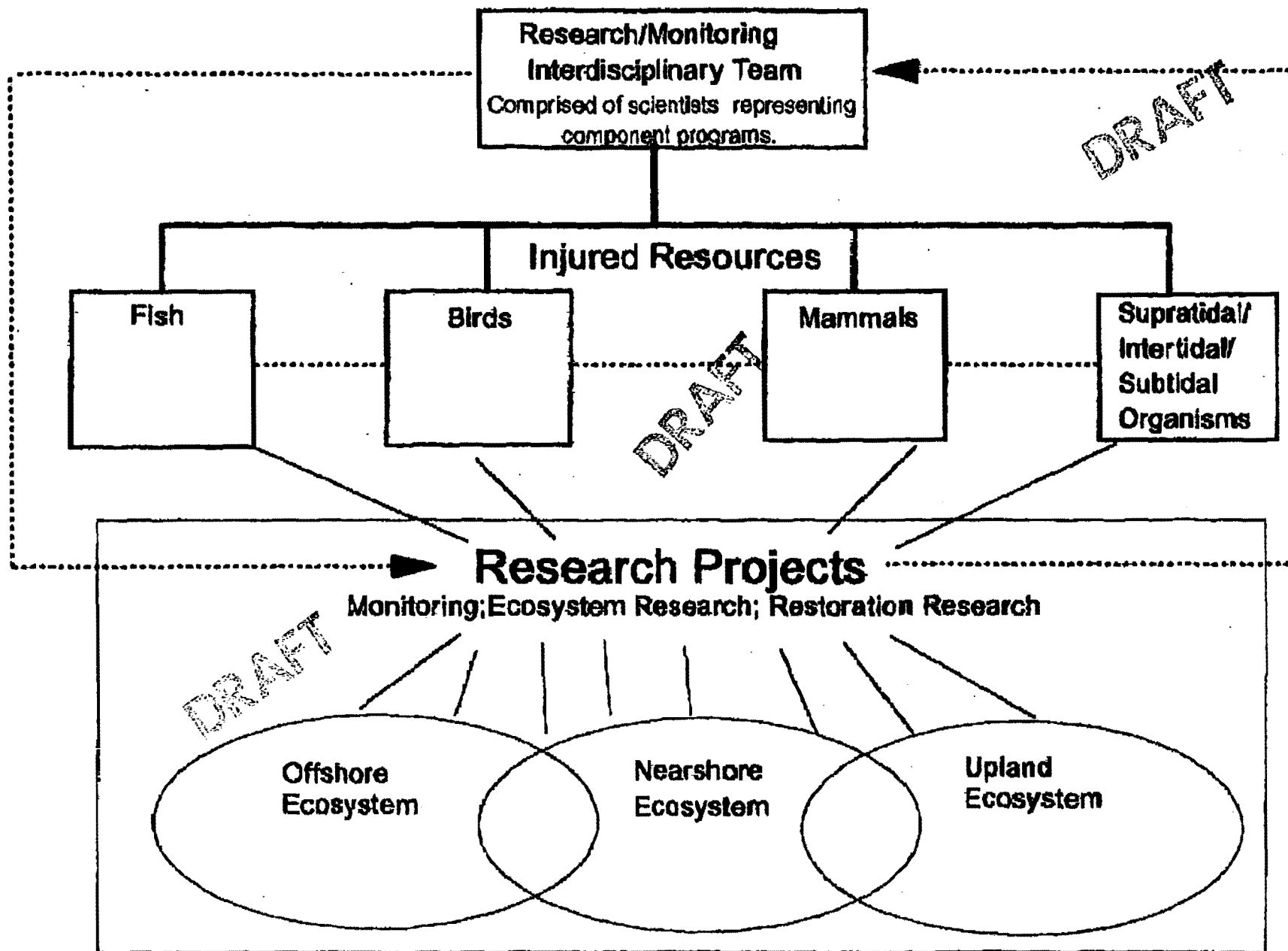
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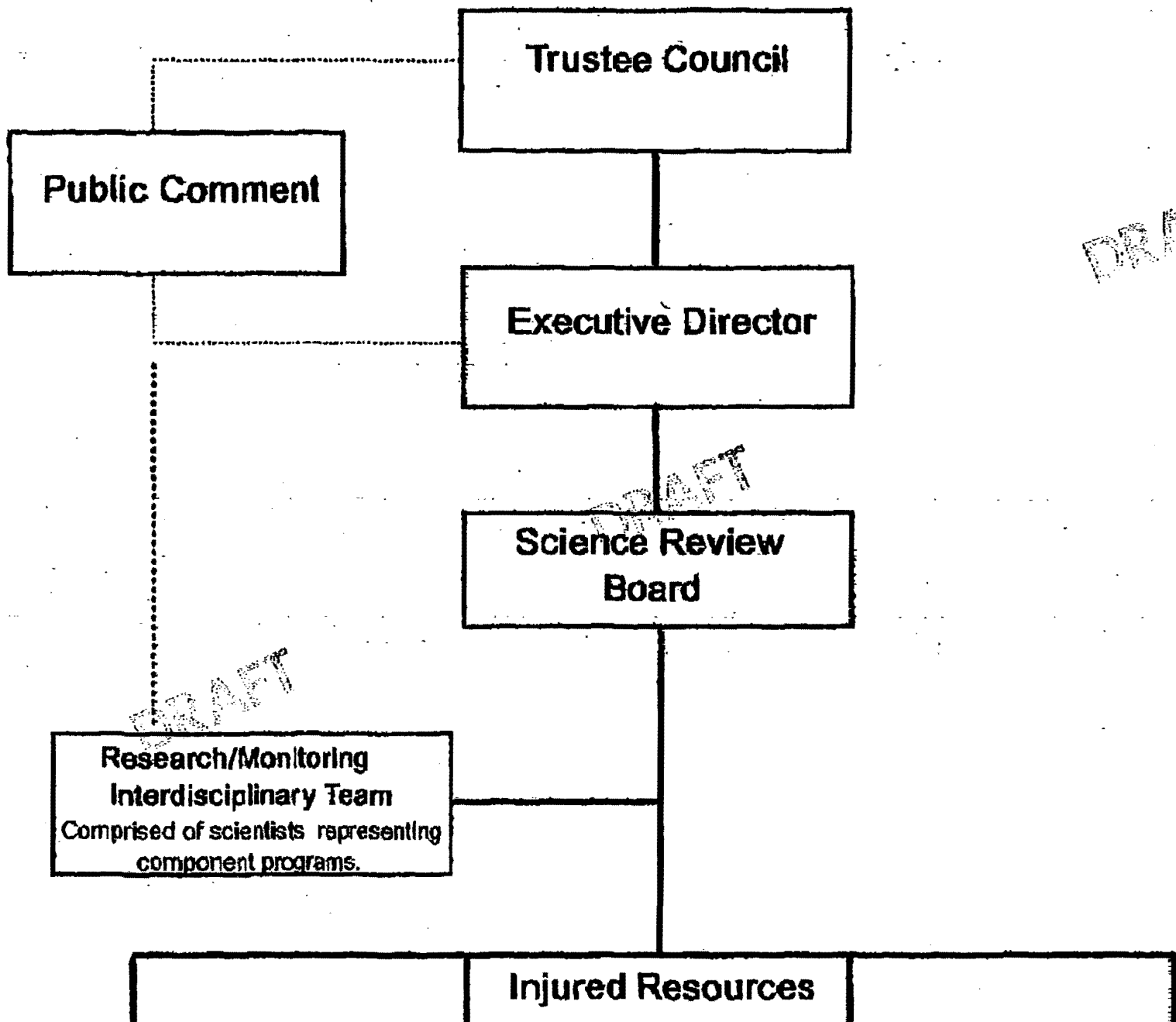
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### Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

# Research/Monitoring Organizational Diagram





DRAFT

Trustee Council

Public Comment

Executive Director

~~DRAFT~~  
Science Review  
Board

DRAFT

Research/Monitoring  
Interdisciplinary Team  
Comprised of scientists representing  
component programs.

Injured Resources

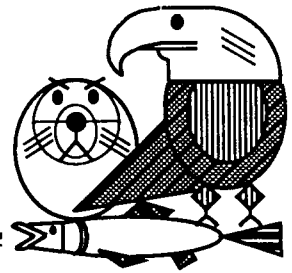
# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178

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## MEMORANDUM

To: Restoration Work Force

From: Molly McCammon

Date: March 8, 1994

Subj: Project # 94320

On Friday March 4, Jim Ayers distributed a memo about the time-sensitive elements of project # 94320 to each Trustee requesting a response by Monday, March 7, 5 p.m. **Please consult with your TC member and fax their response to us in Juneau ASAP at 586-7589.**

There will be an Agency Liaison meeting tomorrow March 9, in Juneau at the NMFS 4th floor conference room at 10:00 a.m. An agenda will be distributed later today.

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

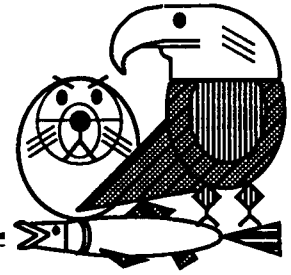
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## FAX COVER SHEET

To: Restoration Work Force Number: \_\_\_\_\_

From: Molly Date: 3-8-94

Comments: \_\_\_\_\_ Total Pages: 2

Memo re: 94320

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J. MONTAGUE

[ 13] 7896608

MORRIS-WRIGHT

[ 14] 2572510

S. RABINOWITCH

[ 15] 5624871

C. FRIES

[ 17] 2713992

R. THOMPSON

[ 18] 5223148

J. SULLIVAN

[ 20] 7863350

T. DEGANGE

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[ 10] 5867555

D. GIBBONS

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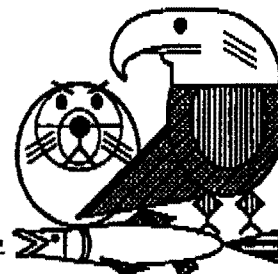
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## Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

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### FAX COVER SHEET

To: Restoration Work Force Number: \_\_\_\_\_

From: Molly Date: 3-8-94

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Memo re: 94320

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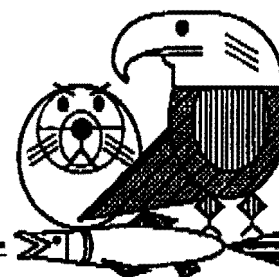
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## Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



### FAX COVER SHEET

To: Restoration Work Force Number: \_\_\_\_\_

From: Molly Date: 3-8-94

Comments: \_\_\_\_\_ Total Pages: 2

Memo re: 94320

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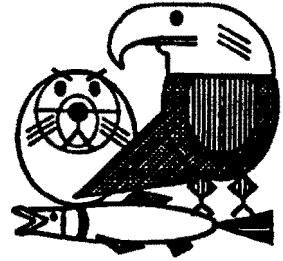
# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178

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March 7, 1994

via Fax: 465-6142

Mr. Wayne Regelin  
Deputy Director  
Division of Wildlife Conservation  
Alaska Department of Fish & Game  
P.O. Box 25526  
Juneau, AK 99802

Dear Mr. Regelin: *Wayne*

Thank you for discussing the Harlequin Duck project with me. If you have identified significant data information that substantiates claims that monitoring this year is imperative to the recovery of Harlequin Ducks, please review it with me immediately!

As I have stated, we are prepared to take critical issues to the Trustees at any point in the work plan cycle.

Sincerely,

*JRA*  
James R. Ayers  
Executive Director

JRA/mir

cc: Trustee Council Members

bcc: Agency Liaisons

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## Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

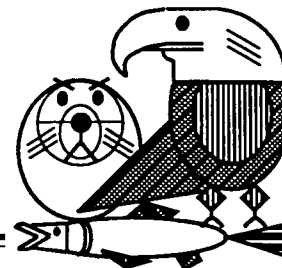
United States: National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

# Exxon Valdez Oil Spill Trustee Council

Restoration Office


645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: George T. Frampton, Jr.  
U.S. Department of Interior

From: Jim Ayers   
Executive Director

Date: March 4 , 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

Attached you will find several supporting documents including: 1) a memo from Dr. Spies describing his recommendation for the time-sensitive elements of Project # 94320; 2) a more detailed memo from Dr. Spies and an agency work group describing further why some equipment is recommended for purchase at this time and why certain other equipment purchases can be deferred; 3) a letter from Dr. Ted Cooney describing how elements of the overall project would be delayed and/or compromised depending on the timing of equipment purchases and final approval of the Detailed Project Descriptions (DPDs).

I recommend that I move forward with Dr. Spies' recommendations for equipment purchase, vessel charters, and start-up personnel costs. As described by Dr. Spies, this funding is an appropriate initial investment in the research capability the Trustee Council will need for continuing investigations of the PWS ecosystem. The recommended expenditures will provide the essential research infrastructure, enable the research to proceed immediately on a pilot phase and permit an expanded effort as methodologies and techniques are determined to be successful. Ownership of the equipment will remain with the Trustee Council for future Trustee projects.

---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

Because Detailed Project Descriptions are still being completed and reviewed, I am unable to give you a final recommendation on the full scope of work that should be authorized for Project # 94320. I anticipate that the DPD review will be completed by mid to late March.

I recommend that the full scope of Project # 94320 be reviewed by the Trustee Council at a teleconferenced meeting in late March.

## III. Funding for Prince William Sound Aquaculture Corporation (PWSAC)

Included in Project # 94320 is \$1.75 million to compensate PWSAC for the costs of manipulating fry releases as an integral part of the research effort. It is my understanding that an additional \$250 thousand, above the original estimate of \$1.5 million, is needed for this component of the project.

There has been some question about whether the hatchery funding should be subject to an Environmental Assessment. However, because this project consists fundamentally of mariculture activities that have been on-going in PWS since the mid-70s and have gone through a comprehensive permitting and public participation process, I believe there is a strong argument for considering this project a "no action alternative" under NEPA and accordingly subject to a categorical exclusion under NOAA's NEPA guidelines. Additionally, this project should fall under NOAA's general permit for mariculture facilities, which include hatcheries. Finally, it should be noted that the project will have no impact on endangered or threatened species.

Although a final determination has yet to be made on the NEPA question, there is a serious time element involved with this project. I strongly recommend each Trustee work with staff so we can resolve this question as quickly as possible.

### Time Sensitive elements of Project #94320

In accordance with your instructions I am providing you with the time sensitive elements of Project #94320. I am prepared to implement those elements immediately, subject to NEPA compliance. Please advise me in writing by Monday, March 7, 5 p.m., whether or not you require a teleconference to further consider these time sensitive elements prior to their implementation. Other components of Project # 94320 will be peer reviewed and brought back to you for consideration before any further expenditure of funds.

Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

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\*\*\* ACTIVITY REPORT \*\*\*  
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G. FRAMPTON

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\*\*\* ACTIVITY REPORT \*\*\*  
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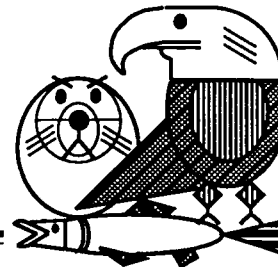
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

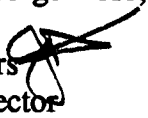
Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: Trustee Council

From: Dr. Robert Spies  
Assisted by Byron Morris & Alex Wertheimer (NMFS), Jerome Montague (ADF&G), George Rose, Bill Percy and Andy Gunther

Thru: James R. Ayers   
Executive Director

Date: March 2, 1994

Subj: Recommendation for Time-critical Expenditures for Project # 94320

On January 31, 1994, the Trustee Council conditionally approved \$6.25 million for Project 94320 (Prince William Sound System Investigation) subject to the successful integration of this project with project #s 94163, 94184, 94185, 94187, 94189, 94192, 94259 and those portions of projects # 94421 that involve research. The Trustees directed the Executive Director to determine which elements of this project were time-critical and to report back to the Council for further action.

Subsequently, we have been directed by the Executive Director to meet with the principals of the Sound Ecosystem Assessment (SEA) group and to develop a recommended course of action concerning this project with respect to time-critical expenditures. The following is that recommendation.

### RECOMMENDED ACTIONS

#### A. Time-critical equipment and personnel expenditures.

We recommend that the Trustee Council immediately approve the following equipment and personnel expenditures for Project # 94320:

- |    |  |          |
|----|--|----------|
| 1. | Hydroacoustic equipment  | \$ 270.0 |
| 2. | Physical oceanography, zooplankton and phytoplankton equipment | 310.0    |
| 3. | Fish food and coded wire tags for PWSAC                        | 45.0     |

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

4.	Juvenile salmon predation/growth/survival	
	Vessel charters	793.5
	Equipment (seines)	44.0
5.	PWSSC project administration	25.0
6.	Avian predation study startup costs	<u>41.5</u>
	SUBTOTAL	\$1,537.0
7.	PWSAC Experimental Manipulation	<u>1,750.0*</u>
	TOTAL	\$3,287.0

\* Authorized subject to NEPA compliance. It is anticipated that an additional \$250.0 will be needed by PWSAC to complete this portion of the project.

#### B. Procurement conditions

We recommend that the Trustee Council approve the following procedures for moving forward with the time-critical elements of this project:

1. Procurement of all equipment identified for UAF and the Prince William Sound Science Center (PWSSC) via a Reimbursable Services Agreement (RSA) between ADF&G and UAF.
2. Vessel charters competitively procured by ADF&G for the full charter period, but based on a daily charter rate, with provision for ending the contract at any time without penalty.
3. Procurement of \$1.795 million to PWSAC pending NEPA compliance, approval of sole source justification by the Alaska Department of Administration and approval of the Detailed Project Description for that portion of Project # 94320.

#### DISCUSSION

The scientific questions being asked by the Prince William Sound System Investigation are laudable and appropriate in order to answer basic questions about the health of the Prince William Sound fisheries. The investigators are scientifically qualified, clear about their goals, and enthusiastic. Significant portions of the investigations proposed as parts of project # 94320 are very ambitious, in particular, those pertaining to juvenile salmon predation. These include the purchase, delivery and implementation of highly sophisticated equipment, the coordination of several vessels and crew, as well as extremely complex field logistics in order to obtain sampling data.

Although the peer review of Detailed Project Descriptions (DPDs) for all of the component parts of project # 94320 has not yet been completed, we nevertheless feel that the recommended expenditures are justified at this time and represent a sound investment in the research capability that will be needed over the next several years.

At the same time, we emphasize that expenditure commitments (especially the salmon predation studies that require extensive vessel support) should be structured and conditioned to accommodate an initial pilot phase that demonstrates the feasibility of the proposed methods. The pilot study should be designed so that it is possible to roll in the rest of the program to full field operation upon a determination that the pilot phase is successful.

Finally, it should be emphasized that the long lead time associated with procurement and deployment of the equipment necessitates an immediate decision if large portions of the study effort are to be undertaken in the coming field season in concert with the spring plankton bloom.

Final Council action is needed as quickly as possible. Any delays will result in a reduced program.

(Note: The recommended purchases and authorizations addressed above is not a complete list of equipment needs for project # 94320 and reflects only equipment and other procurement needs with long lead times that are critical to have "in the water" by April 15.)

\* \* \* \* \*

A more detailed memorandum, including a discussion of equipment requests that are not recommended for funding at this time, is provided as an attachment.

A P P L I E D

*marine*

S C I E N C E S

February 22, 1994

To: James Ayers, Executive Director

From: Bob Spies, Byron Morris, Jerome Montague, Alex Wertheimer and George Rose (with assistance from Bill Percy and Andy Gunther)

Re: Recommendations regarding requisition requests from PWS System Study needing action before detailed study plans are formulated.

The purpose of this memo is make our recommendations regarding immediate funding of ecosystem studies in Prince William Sound in 1994. If projects are to go forward in the field in April, funds need to be allocated now rather than waiting until Detailed Project Descriptions are submitted and reviewed.

We agreed that the scientific questions being asked by the Prince William Sound System Study are laudable and appropriate to answer basic questions about the health of Prince William Sound fisheries. The investigators are scientifically qualified, clear about their goals, and enthusiastic. The physical oceanography, phytoplankton and zooplankton work appears, from the information we have in hand, to be warranted as planned.

We are quite concerned, however, about the feasibility of successfully implementing such a complex program in such a short time frame. A myriad of program elements, such as project design, equipment purchase and installation, logistical planning and personnel decisions must come together precisely in a short period of time for the stated goals to be accomplished for 1994. In particular the purchase, delivery, installation and proper full functioning of the state of the art hydroacoustic and sampling equipment proposed for this study will take time and is not without probable delays. The coordination of several vessels and crews, including their net sampling efforts as determined from hydroacoustic data, and moving within the Sound in concert with the field of hatchery-released juvenile is logistically challenging and has not yet been demonstrated to be feasible.

If all of the project elements do not come together by early spring, public moneys would have been irretrievably committed, particularly to vessel charter costs and perhaps also to salaries, but the project objectives may not be obtainable. Consequently, the program would have to be funded for the same tasks in 1995 to achieve these objectives. The investigators might be at a disadvantage in requesting second year funding if there is a suggestion that large amounts of funds were wasted in the first year. In making our recommendations on requisitions necessary in the next few weeks, we have anticipated that the other peer reviewers who attended the December workshop will raise the same concerns after reading the detailed project descriptions.

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To <i>Molly McCammon</i>	From	
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Using the information presented on the attached requests from Dr. Cooney, and within the context of the various projects for which allocations have been requested we are collectively of the following opinions:

1. The hydroacoustic equipment as requested (\$270K, Attachment 1 B) is appropriate for purchase by the Trustees immediately. The program will need this equipment to be operable as soon as possible. The costs for the items appear to be reasonable, although some of the computer equipment should probably cost less than budgeted.

2. The purchase of a 17' Boston Whaler for the avian predation study is unnecessary. We have identified a Whaler that has already been purchased by the Trustee Council that could be used for this study if it is favorably reviewed (see Attachment 1 A).

3. All of the early requisitions for the physical oceanography, zooplankton and phytoplankton work should also proceed on an as-soon-as-possible basis (Attachment 1 A).

4. Fish food and tags for PWSAC should be approved (Attachment 1 A).

5. The salmon juvenile predation studies that require the extensive vessel support discussed above should have a pilot phase that demonstrates the feasibility of the proposed methods. We are anticipating that peer review comments will indicate that there will probably be delays in achieving full integration and smooth logistical operations in the field programs for these studies. If possible, the pilot study should be designed so that assessment information is quickly available, making it possible to roll the rest of the program into full field operation in this year if the pilot phase is successful. We are recommending therefore that the vessel bids (Attachment 1C) be structured for variable charter times in the coming season to allow for a variety of contingencies without irretrievable commitments to the whole request.

Jerome Montague has proceeded along these lines already. The solicitations for the vessel charters will be for the full charter period but based on a daily charter rate. The solicitations will also state that the charters can be stopped at any time without penalty to the government. This strategy will require having the full cost for the vessel charters actually on ADF&G's books.

6. Installation of the T-1 line requested for communications should be delayed until the pilot program is completed and assessed. This goal of the T-1 is the ability to provide very high speed data transfer capabilities, to bring satellite data downlinked at UAF to Cordova, to make SEA data (and SEA investigators via electronic mail) available to collaborators at other institutions on the Internet, and to provide access in Cordova to high-speed computing facility in Fairbanks. In addition, the T-1 line will provide data transfer capacity to support

videoconferencing. The justification for this capability is that there will be huge volumes of data (10 megabytes per day) that may need to be examined to make decisions on where to next sample.

While this may be the case if the SEA is implemented as ultimately planned with near real-time delivery of data into a mathematical model, we believe that the goal of the SEA as funded by the Trustee Council is to explore the validity of the conceptual model for herring and salmon survival (Lake/River with prey switching). Continuous large-scale data transfer will not be required in this program.

It would be possible to use express shipment of optical disks (several optical disk drives are being purchased), or long-distance direct dial using high speed modems, to transfer data (including electronic mail) between Cordova and UAF (19.2 kbps modems are commercially available for under \$300). The AVHRR satellite images that will be available this spring (SeaWIFS will not be launched until late summer) are 1MB at the largest, which can be transferred uncompressed at 19.2 kbps in about half an hour (assuming no transmission errors due to line noise, etc...). We acknowledge that substituting high-speed modems for the T-1 line would make exchange of large data files much more cumbersome, and could make the work effort less efficient. Given the 3-5 week lead time to implement the communications link, and the fact that lines are leased monthly, it should be feasible to upgrade the data communications link when needed.

We have been unable to obtain further clarification regarding the line item of \$50,000 for "UNIX workstations and peripherals". We believe that additional information regarding the identity of this equipment and the need for its accelerated purchase should be provided.

We also think it may be more cost effective to have the major project participants in Cordova until the logistics of the program are worked out. This will also reduce the immediate need for the T-1 line.

7. With regard to the administrative aspects for the recommended procurements we propose to proceed as follows:

- a. Startup funding for personnel of \$25K will be implemented by amending an existing cooperative agreement between ADF&G and the Prince William Sound Science Center.
- b. All equipment identified for UAF and the Prince William Sound Science Center (PWSSC) will be procured via a Reimbursable Services Agreement (RSA) between ADF&G and UAF. The RSA's usually require about 30 days to get the necessary signatures including the Chancellor of the University. With ADF&G and UAF priority handling this may possibly be reduced to 15 days.

c. Vessel charters will be competitively procured by ADF&G.

d. The 1.5445 million to PWSAC will be procured without competition pending approval of the sole source justification by ADF&G's Division of Administration and approval of the DPD.

8. Based on the opinions offered so far by George Rose and Bill Pearcy (Attachment 2), and those from the Workshop Committee (recommendation 1 in memo of 1/14/94) we think it entirely possible that the peer reviewers and the Chief Scientist will recommend a first-year program in 1994 that includes a pilot phase and hence is smaller in scope than currently being proposed (the January 17, 1994, version of the "SEA Plan") in order to implement this research in the most effective manner.

CC: M. McCammon

**ATTACHMENT 1A**

**Initial Equipment list for FY94 (this list is not complete and reflects only that equipment with long lead times in purchasing/and or is critical to have in the water by April 15.**

**\* Indicates time critical equipment in terms of 90 day waiting period for delivery, after a purchase order is received. There is some flexibility except for ADCP and related equipment.**

**Physical Oceanography**

**\* 1 each 150 kHz direct reading broad band Acoustic Doppler Current Profiler (ADCP) (vessel towed) \$64.2K**

**\* 1 each ENDECO towing body \$19K**

**\* 1 each towing cable \$8K**

**\* 1 each EL-1000 transducer adapter \$4K**

**\* 1 each gyro interface \$4.5K**

**\* 1 each 150 kHz Continental shelf broad band ADCP (moored) \$53K**

**\* 1 each direct reading capability \$9K**

**\* 1 each self contained end cap \$1K**

**\* 1 each additional 30 MB recording capacity \$3K**

**\* 1 each additional battery packs \$7.5K**

**1 each Acoustic release and buoy floats, lines for ADCP deployment \$15K**

**\* 1 each Chelsea Instruments CTD-F, CTD and Fluorimeter \$20K**

**1 each Sea Bird SBE9plus underwater unit for 911plus CTD \$24K**

**1 each SBE 11 plus deck unit \$5K**

**1 each modem and PCB interface \$1.5K**

**1 each SBE 32 Carousel \$14.5K**

**12 each 1.7 liter PVC Niskin bottles @\$0.4K each = \$4.8K**

**2 each Sea Cat CTD's @\$8K each = \$16K**

**2 each deep sea winches @\$15K each = \$30K**

**3 each 486 computers for shipboard data acquisition \$6K**

✓ **Total for Phys. Ocean is \$310K, not \$343K as described in teleconference, remaining \$30K in equipment is not time critical and can be bought once full funds are released.**

**Avian Predation (USFS, Mary Ann Bishop)**

**17 foot Boston Whaler, trailer & 70 hp motor, & shipping \$24.5K**

**PWSAC (Jeff Olsen)**

**Fish food 25,300 kg @ \$1.58/kg = \$40K**

**Coded Wire Tags 35,00 @ \$0.07/tag = \$2.5K**

Attachment 1 B

## SEA EQUIPMENT LIST

## A. Plankton-Nekton Assessment (nearshore fish/predation, \$270K)

1. Simrad 38 kHz scientific split beam sonar system, \$108K.
  - EY500 echosounder, \$36K
  - EP500 echo processor, \$13K
  - BI500, echo integrator, \$30K
  - ES38-12 transducer, \$7K
  - towed body, \$7K
  - tow cable, \$3K
  - HP550C deskjet, \$1K
  - PCMCIA optical drive, \$3K
  - 486 notebook, color with PCMCIA slot, \$4K
  - differential GPS, \$3K
2. Simrad 120 kHz scientific split beam sonar system, \$64K.
  - EY500 echosounder, \$37K
  - ES120-7 transducer, \$7K
  - towed body, \$7K
  - tow cable, \$3K
  - HP500C deskjet, \$1K
  - PCMCIA optical drive, \$3K
  - 486 notebook, color with PCMCIA slot, \$4K
  - differential GPS, \$3K
3. BioSonics 120 kHz digital echosounder system, \$36K.
  - Digital echosounder, \$15K
  - BioSonics towed body, \$7K
  - tow cable, \$3K
  - HP550C deskjet \$1K
  - PCMCIA optical drive, \$3K
  - 486 notebook, color with PCMCIA slot, \$4K
  - differential GPS
4. BioSonics 720 kHz digital echosounder system, \$22K.
  - Digital echosounder, \$15K
  - tow cable, \$3K
  - PCMCIA optical drive, \$3K
  - 486 notebook, color with PCMCIA slot, \$4K
5. two nearshore survey skiffs, \$40K.

## B. Data base management, integration, and modeling, \$130K

1. T-1 line communications, \$80K (matched with NSF funding).
2. UNIX workstations and peripherals, \$50K.

C. Startup funding for personnel in February (March 1, 1994 official start of funding for A. and B.), \$50K.

TOTAL TIME CRITICAL EXPENDITURES \$450K.

## SEA PROGRAM

## TIME CRITICAL EQUIPMENT AND CHARTER COSTS

Table: Summary of time critical equipment and charter costs for the Salmon Predation and Salmon Growth and Survival components of the SEA Program.

Description	Qty	Unit	Unit Cost	Total Cost
<u>Salmon Predation:</u>				
Sm. mesh purse seine(200x30m)	2	ea.	20.0	40.0
70' trawl vessel charter	105	days	3.5	367.0
50' purse seine charter	105	days	1.5	157.0
50' purse seine charter	105	days	1.5	157.0
<u>Salmon Growth &amp; Survival:</u>				
Sm. mesh purse seine(75x15m)	1	ea.	4.0	4.0
60' support vessel	75	ea.	1.5	112.5
Total				837.5

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To <u>Bob Spies</u>	From <u>Mark Willeke</u>	
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Table 1: SEA 1994 (7 month FY) budget summary (amounts in \$K)

REVISED

Project descriptions	Personnel	Travel	Contractual	Commodities	Equipment	Indirect	Project Cost	Organization Totals
PWSSC								1,919.71
Mel/Phys oceanography	126.3	5	105	20	340	61.51	657.81	
Nearshore fish	188	12	41	19	269	62.40	591.40	
Information & modeling	168.9	22.5	83.5	10.5	267	68.50	620.90	
Program management	15	15	5	5	0	9.60	49.60	
ADP&G								1,397.06
Salmon outmigration	*****	phase	in	during	FY95	*****		
Salmon growth	124.2	0.5	114.3	13.2	4	26.6	282.80	
Salmon predators	242.2	3.3	589	20.2	81.6	62.6	998.90	
Harbor seals	6.5	1	15	1.5	0	2.0	26.00	
Zoop sample processing	*****	phase	in	during	FY95	*****		
Administration	0.0	0.0	0.0	0.0	0.0	89.36	89.36	
UAF								543.90
Phytoplankton/Nutrients	92.7	4.5	10.1	9	0	29	145.30	
Zooplankton in Ecosystem	169.5	15	23	7.4	31.5	61.6	308.00	
Larval drift	*****	phase	in	during	FY95	*****		
Trophics/Stable isotopes	24.6	3.2	12	6.9	0	11.7	58.40	
Information & modeling	25.8	1	0	0	0	5.4	32.20	
NBS								32.40
Information & modeling	24.6	0	3.6	4.2	0	0	32.40	
USFS								85.00
Salmon outmigration	*****	phase	in	during	FY95	*****		
Avian predation	25.8	2	23	10	16	8.2	85.00	
PWSAC								45.00
Exper. Fry Release	2.6	0	0	40	2.4	0	45.00	
Total	1,236.70	85.00	1,024.50	166.90	1,011.50	498.47	4,023.07	4,023.07

Due to SEA's interdisciplinary nature, activity funded under one project will frequently support the needs of several projects. This is particularly true for funds listed under Contractual and Equipment.

Table 2: Other projects that complement SEA.

REVISED

Project descriptions	Personnel	Travel	Contractual	Commodities	Equipment	Indirect	Project Cost	Organization Totals
ADF&G								727.20
94184 CWT Recovery	134.6	11.8	18.4	10.3	0.0	21.5	196.60	
94185 Wild Straying	*****	phase	in	during	FY95	*****		
94187 Otolith Marking	30.0	0.0	295.0	15.2	0.0	19.2	359.40	
94189 Pink Genetics	36.2	3.0	112.2	6.5	0.0	13.3	171.20	
94192 Hatchery Straying	*****	phase	in	during	FY95	*****		
94163 Forage Fish	*****	integrate	with	SEA	Program	*****	0.00	
PWSAC								1,500.00
Exper. Manipulation	845.5	31.7	170.0	452.8	0.0	0.0	1,500.00	
Total	1,046.30	46.50	595.60	484.80	0.00	54.00	2,227.20	2,227.20

Grand Total 6,250.00

AMS - Robt Spies  
FAX 510 373 7834

Attachment 2.

Dear Bob:

I looked over the information you sent on the SEA Program. I am in general agreement with the intended objectives. This project could provide vital data on the interactions of physical oceanography, plankton dynamics and predation and growth of juvenile pink salmon of the PWS region.

The project proposed for April-July 1994 is, however, exceedingly ambitious. Can they purchase, trouble-shoot, and calibrate all the equipment requested and deploy it by April 15, i.e., 2 ADCP's, 2 Simrad split-beam echosounders, and 2 Biosonics digital echosounder systems, plus the CTD's? This may be an overload. I am not familiar enough with the qualifications of the technical support staff to know if this is feasible, and if technical support are available to effectively man the four or five vessels simultaneously.

Details of the cruises and sampling plans are sketchy. I'm not sure how is doing what (ADFG, UAF, NMFS). I would be more comfortable with a less frenetic, more tractable field program the first year. This could include the trawler, one seiner and the fry catcher boats. The trawler is scheduled for physical/biological oceanography and could supplant the physical oceanographic vessel, whose mission was not detailed. Even with these three boats, I would want to ensure that a combined 285 days at sea for 11 crew is really reasonable.

On equipment: physical oceanography--all useful; ADCP's are spendy but could provide valuable data on currents into and out of PWS. If only one seiner is used, only one Sea Cat/winch are needed.

: plankton-nekton--presumably the Simrads (38.5 kHz for fish, 120 kHz for zooplankton) are for the trawler; the Biosonics 120 and 720 kHz are for the seiners? What's the justification for the 720 kHz?

I have not talked with any of the principal investigators about the proposed research or the equipment/budget, but would do so. You should let me know if this is advisable.

Sorry we missed connections last week. Hope this helps. Let me know if I can do anything else.

Bill Pearcy,

*Bill*

FAX (503) 737-2064

A P P L I E D  
*marine*  
S C I E N C E S

March 2, 1994

TO: Molly McCammon  
Director of Operations

FROM: Andrew Gunther  
Applied Marine Sciences

*Andy*

RE: Avian Predation on Herring Spawn

It has come to my attention that there was a small oversight in the February 22 memo from Bob Spies to Jim Ayers regarding priority funding needs for Project 94320 (PWS System Study). The Avian Predation on Herring Spawn project is a part of the PWS System Study that, based upon my discussions with Bob Spies, I fully expect will be endorsed by peer reviewers, and the Principal Investigator (Dr. Mary Anne Bishop) has already forwarded a DPD to us for peer review.

As you are aware, the herring spawn occurs in early Spring, and Dr.. Bishop is planning to put a staff member on an ADF&G herring vessel, and put another vessel out to study a site on Montague Island. In addition, much of the project's aerial survey work will occur in April. For this work to occur in early April, equipment must be purchased and personnel hired and outfitted. Dr. Bishop has informed me that \$41,500 will cover these start-up costs, including salaries through April 30, 1994.

I have been unable to contact Bob regarding his opinion on this issue. I am sure that he would have recommended this funding had it been included in Ted Cooney's original request. I will continue to try and reach him, and will call you as soon as I have talked with him.



# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

WALTER J. HICKEL, GOVERNOR

P.O. BOX 669  
CORDOVA, ALASKA 99574-0669  
PHONE: (907) 424-3212  
FAX: (907) 424-3235

Jim Ayers, Molly McCammon and Eric Myers  
Trustee Council Administration and,  
Bob Spies, Chief Scientist

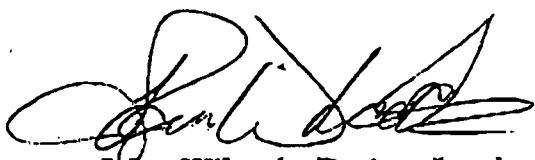
March 2, 1994

Dear Madame and Sirs:

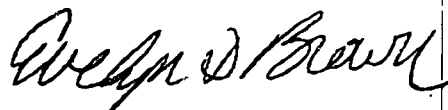
We would like to express our support and concern for the "avian predation on herring spawn" study out of the SEA plan, Project 94320. We are requesting an expedited review of the detailed study plan to ensure that operations can begin on time due to an inflexible and very brief sampling window. This study will be closely coordinated with "herring spawn deposition and reproductive impairment", Project 94166, including shared charter vessel space and synoptic sampling of predation and egg loss data. Both projects are time-sensitive because we need to hire or notify personnel within the next week and assemble sampling equipment to begin as soon as herring spawning activity commences. Spawning generally begins the end of March in the southeastern portion of Prince William Sound and the first or second week of April in the Montague Area, the major study area.

The data provided by the avian predation study will fill a large gap in our understanding of egg loss and ultimately help to improve our ability to predict larval herring production. Bird predation has been identified as a major source of herring egg loss during incubation and as an important implementation objective within the Natal Habitat Program (NHP) of the SEA plan. We have been working very closely with Dr. Mary Anne Bishop of the Copper River Delta Institute, USFS, in Cordova and look forward to continuing and coordinating our research.

Sincerely,



John Wilcock, Project Leader



Evelyn Brown, Co-leader

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To <sup>K-1</sup> Jim, Molly + Eric	From Hernig PIs	
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United States  
Department of  
Agriculture

Forest  
Service

Pacific Northwest  
Research Station/  
Alaska Region

Copper River Delta Institute  
P.O. Box 1460  
Cordova, AK 99574  
(907) 424-7212  
FAX (907) 424-7214

*Caring for the Land and Serving People*

Bob B. Spies, Chief Scientist  
Exxon Valdez Restoration Trustee Council  
645 G Street  
Anchorage, AK 99501

Date: 2 March 1994

Dear Dr. Spies:

Attached please find a detailed budget for the Avian Predation on Herring Spawn project during March and April 1994. A summary of the budget categories are:

Personnel	\$12,150
Contracts	8,625
Equipment	10,471
Commodities	10,219
<hr/> Total	<hr/> \$41,466

This budget does not include the 10% overhead costs, nor does it include my personnel costs. My time is being provided in-kind by the Copper River Delta Institute.

I appreciate your request to the Trustees for the budget approval for our March and April expenses. I look forward to hearing from you soon on their decision. Thank you very much for your help.

Best wishes,

*Mary Anne Bishop Ph.D.*

Mary Anne Bishop, Ph.D.  
Project Leader - Avian Predation on Herring Spawn

Enc..

cc: Jim Ayers, Executive Dtr.  
EVOS Restoration Trustee Council

R. Ted Cooney, Science Chair  
SEA Plan



## Avian Predation on Herring Spawn

March-April 1994 Budget

03/02/94

**SONNEL**

Position	Months Budgeted	Cost
Wildlife Technician	1.5	\$4,050.0
Wildlife Technician	1	\$2,700.0
Wildlife Technician	1	\$2,700.0
Wildlife Technician	1	\$2,700.0
FTE Equivalents		0.38
Total Cost		\$12,150.00

**CONTRACTS**

Contract	Item	Price	Qty.	Total
Aerial Surveys	2.5 Hour flight	\$575.00	15	\$8,625.00
TOTALS				Total Cost \$8,625.00

**EQUIPMENT**

Item	Qty.	Price	Total	Subtotal
<b>CAMP</b>				
Propane stove	1	\$54.95	\$54.95	
propane hose	1	\$29.95	\$29.95	
Generator	1	\$650.00	\$650.00	\$734.90
<b>COMMUNICATIONS</b>				
2 VHF Hand-helds, 6-watt	2	\$389.00	\$778.00	\$778.00
<b>BOAT</b>				
Cockpit	1	\$1,700.00	\$1,700.00	\$1,700.00
<b>OPTICS</b>				
Binoculars	4	\$878.00	\$3,512.00	
Spotting Scopes	2	\$334.00	\$668.00	
Spotting Scopes	2	\$117.00	\$234.00	
Tripods	2	\$98.00	\$196.00	
Tripods	2	\$55.00	\$110.00	
Microcassette recorders	2	\$90.00	\$180.00	\$4,900.00
<b>COMPUTER AND SOFTWARE</b>				
Observer Program	1	\$2,250.00	\$2,250.00	
Tide.1 Program	1	\$109.00	\$109.00	\$2,359.00
Total cost				\$10,471.90

## Avian Predation on Herring Spawn

March-April 1994 Budget

03/02/94

**MODITIES**

Item	Qty	Price	Total	Subtotals
<b>CAMP SUPPLIES</b>				
food & sundries for 1 person/20days	4	\$300.00	\$1,200.00	
Foam sleeping mats	3	\$24.95	\$74.85	
Extension Cord	1	\$25.00	\$25.00	
Outlet Strip	1	\$25.00	\$25.00	
First-Aid Kit	1	\$300.00	\$300.00	
Bear Box	1	\$400.00	\$400.00	
Fire Extinguisher	1	\$15.00	\$15.00	
Propane			\$150.00	
Lumber		\$200.00	\$200.00	
				\$2,389.85
<b>SCIENTIFIC SUPPLIES</b>				
Pelican Case	4	\$30.00	\$120.00	
Pelican Case	3	\$40.00	\$120.00	
Pelican Case	1	\$50.00	\$50.00	
Glass jars	1	\$400.00	\$400.00	
Alcohol	1	\$100.00	\$100.00	
anti-oxidant	1	\$100.00	\$100.00	
Dissection Kit	2	\$60.00	\$120.00	
				\$1,010.00
<b>FIELD SAMPLING SUPPLIES</b>				
Mustang Suits	4	\$325.00	\$1,300.00	
Survival Suits	2	\$300.00	\$600.00	
Waders	3	\$70.00	\$210.00	
asoline	270	\$2.50	\$675.00	
			\$40.00	
Gas Barrels	5	\$42.00	\$210.00	
Barrel Pump w/ filter	1	\$190.00	\$190.00	
Transport to Site	5	\$100.00	\$500.00	
				\$3,725.00
<b>BOAT SUPPLIES</b>				
Signal Kit	1	\$40.00	\$40.00	
Fire Extinguisher	1	\$15.00	\$15.00	
Hand Bilge Pump	1	\$20.00	\$20.00	
Boat hook	1	\$20.00	\$20.00	
Tool Kit	1	\$200.00	\$200.00	
Stainless Steel Prop	1	\$300.00	\$300.00	
General Boat Maintenance	1	\$1,000.00	\$1,000.00	
Refiberglassing hull	1	1500	\$1,500.00	
				\$3,095.00
			Total Cost	\$10,219.85

**SUMMARY**

Personnel	\$12,150.00
Contracts	\$8,625.00
Equipment	\$10,471.90
Commodities	\$10,219.85

Total	\$41,466.75
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INSTITUTE OF MARINE SCIENCE

UNIVERSITY OF ALASKA  
FAIRBANKS, ALASKA 99701

28 February 1994

Members EVOS Trustee Council  
Restoration Office  
645 G Street  
Anchorage, Alaska 99501

Dear Trustees,

Two and a half weeks ago, scientists developing the FY94 implementation plan for ecosystem research in Prince William Sound met via teleconference with Dr. Robert Spies and members of the management team established by Executive Director Ayers to assist the Prince William Sound System Investigation (94320). The purpose of that meeting was to discuss time-sensitive expenditures (equipment and vessel charter) needed to expedite research anticipated this spring and summer. A list of "time-critical" elements was sent to Dr. Spies as follow-up to that discussion. This past week, Dr. Spies and others sent their recommendations to Mr. Ayers. No action has been forthcoming.

As the Principal Scientist for the Prince William Sound ecosystem program, it has come to my attention that there remain some very fundamental concerns about the structure of the emerging approach, the scientific expertise involved with the overall project, the nature of the start-up in FY94, and the necessity for pre-award arrangements for vessel charter and critical equipment purchases. In as much as these uncertainties seem to be delaying a crucial decision about proceeding, let me try to address these issues.

As I explained at the January Trustee Council Meeting, ecosystem research of the kind being planned for Prince William Sound is not new to the ocean sciences. This is because of the fundamental differences in approach routinely adopted by fisheries scientists and oceanographers. The latter have historically focused (with considerable success) on large-scale processes and interconnecting components. The point is that while the Prince William Sound ecosystem study will be unique to the region, the coordinated approach is based on time-tested procedures used for years. The work we propose to undertake in FY94 and beyond has a high probability of success on that basis alone.

It is true that many of the participants in the Prince William Sound study come from outside the agencies. Oceanographic, acoustic, and ecosystem modeling expertise is being contributed by non-profit and academic scientists, most of whom either reside in the region or have had a history of research in Prince William Sound. Local familiarity with the Sound greatly facilitated the development of the SEA conceptual plan. Of equal importance, the proximity of Fish and Game and the Science Center in Cordova assure that scientific interactions between investigators will be possible that otherwise would have to be accommodated by extensive travel or teleconferencing. Be assured that all non-agency scientists and their respective projects are being watched carefully and judged by peers in their professions (both within and outside the ecosystem study). None of these individuals is interested in anything less than first-rate science. I certainly am not.

There is no question that the ecosystem study required to understand how the Sound functions to sustain higher-level consumers will be complex. The fact is that the phenomena being investigated are very complicated and can only be sufficiently understood using a long-term coordinated, multi-component, interdisciplinary approach. The program being developed for Prince William Sound represents a strong interactive mix of appropriate disciplines and technologies focused by critical testable hypotheses. It could be re-engineered, but so could almost any research program on the books. In any event, the result would almost surely be the same - a multi-component, cooperative, interdisciplinary study of several years duration.

The issue of whether or not the EVOS restoration process has spent enough money on science continues to be passionately aired (see the March 1994 issue of Outside magazine). Even members of Prince William Sound communities find themselves on opposite sides of the fence on this one. Most would like to find the "smoking oil gun" so that successful litigation could proceed - a science-driven query. At the same time, many feel that any more money for science is wasteful, and that the real issue is one of protecting habitat - buying timber resources. In reality, the dilemma I see is one of thoughtfully partitioning the remaining funding for these (and other) important activities. This is where carefully planned ecosystem-based science and management comes in. This is where the SEA and related studies program for Prince William Sound fits.

I don't believe there is much disagreement that understanding how Prince William Sound functions as a coupled physical and biological system is the key to determining the degree to which production trends in some fishes, marine birds and mammals are attributable to a long-term oil spill effect. As we have demonstrated before, natural biological systems (like Prince William Sound) exhibit measurable variability at higher trophic levels for reasons that are believed to be associated with seasonal, interannual and multi-year scales of physical forcing (climate/weather and oceanography). The point is that cycles of

high and low production are to be expected given the "noise" in the forcing variables observed for the Gulf of Alaska. Also, because each region (southeast Alaska, Prince William Sound, lower Cook Inlet and Kodiak) differs oceanographically, there will be times when the production cycle for these locations will be out of phase.

I cannot overemphasize the need for a timely and careful start to the Prince William Sound study. The most important aspect of each year's science is the characterization of prey/predator relationships governing the survival of the early life stages of the target species. For pink salmon and herring, most of the losses to populations of free swimming or drifting larval and juvenile forms probably occur during April, May and early June. Furthermore, good or poor years for survival during this time are established a month or so earlier by events influencing plankton production. This means that some observers must generally be in the field as early as mid-March to begin each year's critical environmental and ecological characterizations.

Because of the uncertain funding schedule for SEA and related studies in FY94, it seems likely that some field sampling compromises will have to be made this first year. However, a significant start can be accomplished if the study is prepared to enter the field in late April or at least by early May. To do this, the Council and their agents must agree to proceed with the "time-sensitive" recommendations made by Dr. Spies. Unless the project is allowed to proceed now (or very shortly) with vessel charter arrangements and equipment procurements, it is unlikely that the program will be able to address many of the important aspects of the early life histories of pink salmon and herring this year.

I look forward to discussing these (and any other) matters with you at your earliest convenience. Attached is a break-down of fallback possibilities for study this year.

Sincerely,



R. Ted Cooney  
School of Fisheries and Ocean Sciences  
University of Alaska Fairbanks

CC Jim Ayers  
Robert Spies

SEA and Related Studies for Prince William Sound 94320  
Startup - FY94

Providing that a go-ahead for time-sensitive vessel charter and equipment/supplies can be implemented the first week of March, the following schedule for FY 94 is possible:

April 1-15 The avian predation study on herring eggs can begin in cooperation with the ADF&G herring spawning survey.

April 15-30 Start of the coordinated plankton, and prey predator studies of pink salmon in the northwest portion of the Sound. This timing will provide measures of the decreasing phytoplankton bloom, of increasing populations of upper-layer macrozooplankton populations, and of prey/predator relationships for early released pink salmon from the Wally Noerenberg Hatchery on Esther Island. The study would then track these populations down Knight Island Passage (in June) and through their staging growth period in the the southern Sound (July).

If the decision to fund is delayed by the peer review of all DPDs for SEA and related studies (late March at the earliest), the project will be set back another month (longer for some items). Under these conditions SEA could expect to accomplish the following:

May 15-30 Characterize the declining macrozooplankton bloom and prey/predator relationships for later releases of fry from the WNH at Esther Island and from other locations in northern Prince William Sound (Cannery Creek and Solomon Gulch). Begin following fry southward into Knight Island passage measuring predators and prey along the migratory pathway. Observe the zooplankton regime shift (upper-layer macrozooplankton leaving the surface) and expected changes in the feeding strategies of all consumers ( planktivory to piscivory). Continue following juvenile salmon southward to staging areas in the passages of the southwestern part of the Sound. Measure fry growth rates and survey predator populations in the mid-summer staging areas.

If the startup of the project is delayed (for whatever reason), by 2 months, the following could still be accomplished:

June 15-30 Study prey predator relationships for juvenile pink salmon rearing in the southwest portion of the Sound. Recapture tagged fry for growth rate measures and food dependencies. Confirm changes in the upper-layer macrozooplankton forage fields.

If the study is delayed beyond a 1 July field start, it will be reduced to a prey/predator study of juvenile salmon preparing to leave for open ocean feeding grounds. However, because most of the important mortality during early marine residence will have occurred by that time, these findings will be of limited value.

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\*\*\* ACTIVITY REPORT \*\*\*  
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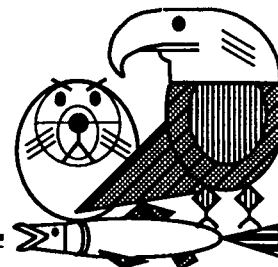
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office


645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: Mike Barton  
U.S. Forest Service

From: Jim Ayers   
Executive Director

Date: March 4 , 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

Attached you will find several supporting documents including: 1) a memo from Dr. Spies describing his recommendation for the time-sensitive elements of Project # 94320; 2) a more detailed memo from Dr. Spies and an agency work group describing further why some equipment is recommended for purchase at this time and why certain other equipment purchases can be deferred; 3) a letter from Dr. Ted Cooney describing how elements of the overall project would be delayed and/or compromised depending on the timing of equipment purchases and final approval of the Detailed Project Descriptions (DPDs).

I recommend that I move forward with Dr. Spies' recommendations for equipment purchase, vessel charters, and start-up personnel costs. As described by Dr. Spies, this funding is an appropriate initial investment in the research capability the Trustee Council will need for continuing investigations of the PWS ecosystem. The recommended expenditures will provide the essential research infrastructure, enable the research to proceed immediately on a pilot phase and permit an expanded effort as methodologies and techniques are determined to be successful. Ownership of the equipment will remain with the Trustee Council for future Trustee projects.

---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

Because Detailed Project Descriptions are still being completed and reviewed, I am unable to give you a final recommendation on the full scope of work that should be authorized for Project # 94320. I anticipate that the DPD review will be completed by mid to late March.

I recommend that the full scope of Project # 94320 be reviewed by the Trustee Council at a teleconferenced meeting in late March.

## III. Funding for Prince William Sound Aquaculture Corporation (PWSAC)

Included in Project # 94320 is \$1.75 million to compensate PWSAC for the costs of manipulating fry releases as an integral part of the research effort. It is my understanding that an additional \$250 thousand, above the original estimate of \$1.5 million, is needed for this component of the project.

There has been some question about whether the hatchery funding should be subject to an Environmental Assessment. However, because this project consists fundamentally of mariculture activities that have been on-going in PWS since the mid-70s and have gone through a comprehensive permitting and public participation process, I believe there is a strong argument for considering this project a "no action alternative" under NEPA and accordingly subject to a categorical exclusion under NOAA's NEPA guidelines. Additionally, this project should fall under NOAA's general permit for mariculture facilities, which include hatcheries. Finally, it should be noted that the project will have no impact on endangered or threatened species.

Although a final determination has yet to be made on the NEPA question, there is a serious time element involved with this project. I strongly recommend each Trustee work with staff so we can resolve this question as quickly as possible.

### Time Sensitive elements of Project #94320

In accordance with your instructions I am providing you with the time sensitive elements of Project #94320. I am prepared to implement those elements immediately, subject to NEPA compliance. Please advise me in writing by Monday, March 7, 5 p.m., whether or not you require a teleconference to further consider these time sensitive elements prior to their implementation. Other components of Project # 94320 will be peer reviewed and brought back to you for consideration before any further expenditure of funds.

Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

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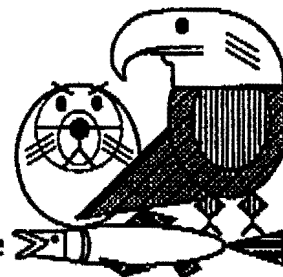
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## Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



### FAX COVER SHEET

To: Trustee Council Number: \_\_\_\_\_  
Agency Liaisons  
From: Jim Ayers Date: 3-4-94

Comments: \_\_\_\_\_ Total Pages: 25

Please forward to the TC/AL  
member in your office. Thank you

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\*\*\* ACTIVITY REPORT \*\*\*  
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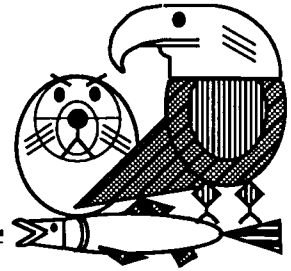
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

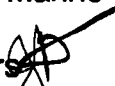
645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: Steve Pennoyer  
National Marine Fisheries Service

From: Jim Ayers   
Executive Director

Date: March 4 , 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

Attached you will find several supporting documents including: 1) a memo from Dr. Spies describing his recommendation for the time-sensitive elements of Project # 94320; 2) a more detailed memo from Dr. Spies and an agency work group describing further why some equipment is recommended for purchase at this time and why certain other equipment purchases can be deferred; 3) a letter from Dr. Ted Cooney describing how elements of the overall project would be delayed and/or compromised depending on the timing of equipment purchases and final approval of the Detailed Project Descriptions (DPDs).

I recommend that I move forward with Dr. Spies' recommendations for equipment purchase, vessel charters, and start-up personnel costs. As described by Dr. Spies, this funding is an appropriate initial investment in the research capability the Trustee Council will need for continuing investigations of the PWS ecosystem. The recommended expenditures will provide the essential research infrastructure, enable the research to proceed immediately on a pilot phase and permit an expanded effort as methodologies and techniques are determined to be successful. Ownership of the equipment will remain with the Trustee Council for future Trustee projects.

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

Because Detailed Project Descriptions are still being completed and reviewed, I am unable to give you a final recommendation on the full scope of work that should be authorized for Project # 94320. I anticipate that the DPD review will be completed by mid to late March.

I recommend that the full scope of Project # 94320 be reviewed by the Trustee Council at a teleconferenced meeting in late March.

## III. Funding for Prince William Sound Aquaculture Corporation (PWSAC)

Included in Project # 94320 is \$1.75 million to compensate PWSAC for the costs of manipulating fry releases as an integral part of the research effort. It is my understanding that an additional \$250 thousand, above the original estimate of \$1.5 million, is needed for this component of the project.

There has been some question about whether the hatchery funding should be subject to an Environmental Assessment. However, because this project consists fundamentally of mariculture activities that have been on-going in PWS since the mid-70s and have gone through a comprehensive permitting and public participation process, I believe there is a strong argument for considering this project a "no action alternative" under NEPA and accordingly subject to a categorical exclusion under NOAA's NEPA guidelines. Additionally, this project should fall under NOAA's general permit for mariculture facilities, which include hatcheries. Finally, it should be noted that the project will have no impact on endangered or threatened species.

Although a final determination has yet to be made on the NEPA question, there is a serious time element involved with this project. I strongly recommend each Trustee work with staff so we can resolve this question as quickly as possible.

### Time Sensitive elements of Project #94320

In accordance with your instructions I am providing you with the time sensitive elements of Project #94320. I am prepared to implement those elements immediately, subject to NEPA compliance. Please advise me in writing by Monday, March 7, 5 p.m., whether or not you require a teleconference to further consider these time sensitive elements prior to their implementation. Other components of Project # 94320 will be peer reviewed and brought back to you for consideration before any further expenditure of funds.

Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

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\*\*\* ACTIVITY REPORT \*\*\*  
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TRANSMISSION OK

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\*\*\* ACTIVITY REPORT \*\*\*  
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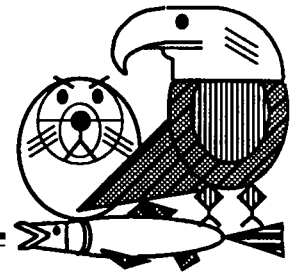
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RESULT	OK

# Exxon Valdez Oil Spill Trustee Council

Restoration Office


645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: John Sandor  
Alaska Department of Environmental  
Conservation

From: Jim Ayers   
Executive Director

Date: March 4, 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

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---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

Because Detailed Project Descriptions are still being completed and reviewed, I am unable to give you a final recommendation on the full scope of work that should be authorized for Project # 94320. I anticipate that the DPD review will be completed by mid to late March.

I recommend that the full scope of Project # 94320 be reviewed by the Trustee Council at a teleconferenced meeting in late March.

## III. Funding for Prince William Sound Aquaculture Corporation (PWSAC)

Included in Project # 94320 is \$1.75 million to compensate PWSAC for the costs of manipulating fry releases as an integral part of the research effort. It is my understanding that an additional \$250 thousand, above the original estimate of \$1.5 million, is needed for this component of the project.

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### Time Sensitive elements of Project #94320

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Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

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\*\*\* ACTIVITY REPORT \*\*\*  
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TRANSMISSION OK

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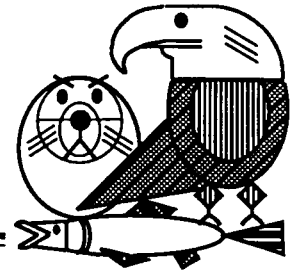
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office

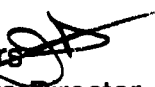
645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: Carl Rosier  
Alaska Department of Fish & Game

From: Jim Ayers   
Executive Director

Date: March 4 , 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

Attached you will find several supporting documents including: 1) a memo from Dr. Spies describing his recommendation for the time-sensitive elements of Project # 94320; 2) a more detailed memo from Dr. Spies and an agency work group describing further why some equipment is recommended for purchase at this time and why certain other equipment purchases can be deferred; 3) a letter from Dr. Ted Cooney describing how elements of the overall project would be delayed and/or compromised depending on the timing of equipment purchases and final approval of the Detailed Project Descriptions (DPDs).

I recommend that I move forward with Dr. Spies' recommendations for equipment purchase, vessel charters, and start-up personnel costs. As described by Dr. Spies, this funding is an appropriate initial investment in the research capability the Trustee Council will need for continuing investigations of the PWS ecosystem. The recommended expenditures will provide the essential research infrastructure, enable the research to proceed immediately on a pilot phase and permit an expanded effort as methodologies and techniques are determined to be successful. Ownership of the equipment will remain with the Trustee Council for future Trustee projects.

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

Because Detailed Project Descriptions are still being completed and reviewed, I am unable to give you a final recommendation on the full scope of work that should be authorized for Project # 94320. I anticipate that the DPD review will be completed by mid to late March.

I recommend that the full scope of Project # 94320 be reviewed by the Trustee Council at a teleconferenced meeting in late March.

## III. Funding for Prince William Sound Aquaculture Corporation (PWSAC)

Included in Project # 94320 is \$1.75 million to compensate PWSAC for the costs of manipulating fry releases as an integral part of the research effort. It is my understanding that an additional \$250 thousand, above the original estimate of \$1.5 million, is needed for this component of the project.

There has been some question about whether the hatchery funding should be subject to an Environmental Assessment. However, because this project consists fundamentally of mariculture activities that have been on-going in PWS since the mid-70s and have gone through a comprehensive permitting and public participation process, I believe there is a strong argument for considering this project a "no action alternative" under NEPA and accordingly subject to a categorical exclusion under NOAA's NEPA guidelines. Additionally, this project should fall under NOAA's general permit for mariculture facilities, which include hatcheries. Finally, it should be noted that the project will have no impact on endangered or threatened species.

Although a final determination has yet to be made on the NEPA question, there is a serious time element involved with this project. I strongly recommend each Trustee work with staff so we can resolve this question as quickly as possible.

### Time Sensitive elements of Project #94320

In accordance with your instructions I am providing you with the time sensitive elements of Project #94320. I am prepared to implement those elements immediately, subject to NEPA compliance. Please advise me in writing by Monday, March 7, 5 p.m., whether or not you require a teleconference to further consider these time sensitive elements prior to their implementation. Other components of Project # 94320 will be peer reviewed and brought back to you for consideration before any further expenditure of funds.

Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

\*\*\*\*\*  
\*\*\* ACTIVITY REPORT \*\*\*  
\*\*\*\*\*

TRANSMISSION OK

TX/RX NO.	7076	
CONNECTION TEL		4652332
CONNECTION ID	C.ROSIER	
START TIME	03/04 19:07	
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RESULT	OK	

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\*\*\* ACTIVITY REPORT \*\*\*  
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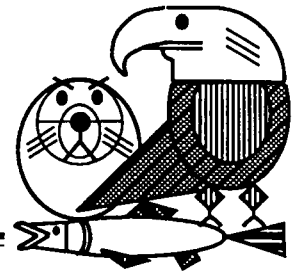
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# Exxon Valdez Oil Spill Trustee Council

Restoration Office


645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

To: Bruce Botelho  
Craig Tillery  
Alaska Department of Law

From: Jim Ayers   
Executive Director

Date: March 4 , 1994

Subj: Authorization for Project # 94320

As directed by the Trustee Council at your January 31, 1994 meeting, I have been in consultation with Dr. Spies and the Prince William Sound System Investigation study group concerning the time-sensitive elements of Project # 94320. I concur with the recommendations of Dr. Spies as reflected in the attached documents.

### I. Equipment and Vessel Charters

Attached you will find several supporting documents including: 1) a memo from Dr. Spies describing his recommendation for the time-sensitive elements of Project # 94320; 2) a more detailed memo from Dr. Spies and an agency work group describing further why some equipment is recommended for purchase at this time and why certain other equipment purchases can be deferred; 3) a letter from Dr. Ted Cooney describing how elements of the overall project would be delayed and/or compromised depending on the timing of equipment purchases and final approval of the Detailed Project Descriptions (DPDs).

I recommend that I move forward with Dr. Spies' recommendations for equipment purchase, vessel charters, and start-up personnel costs. As described by Dr. Spies, this funding is an appropriate initial investment in the research capability the Trustee Council will need for continuing investigations of the PWS ecosystem. The recommended expenditures will provide the essential research infrastructure, enable the research to proceed immediately on a pilot phase and permit an expanded effort as methodologies and techniques are determined to be successful. Ownership of the equipment will remain with the Trustee Council for future Trustee projects.

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

## II. Detailed Project Descriptions

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Although a final determination has yet to be made on the NEPA question, there is a serious time element involved with this project. I strongly recommend each Trustee work with staff so we can resolve this question as quickly as possible.

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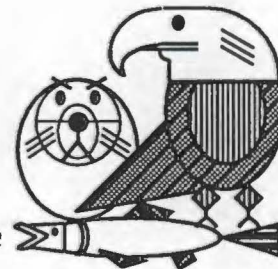
Please contact Molly McCammon at 278-8012 immediately if you would like a detailed briefing on the above recommendation by Dr. Spies and Dr. Cooney.

# 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: Trustee Council

From: Dr. Robert Spies  
Assisted by Byron Morris & Alex Wertheimer (NM  
(ADF&G), George Rose, Bill Percy and Andy Gu

Thru: James R. Ayers  
Executive Director

Date: March 2, 1994

Subj: Recommendation for Time-critical Expenditures for Project # 94320

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3/11/94 to reflect accuracy

On January 31, 1994, the Trustee Council conditionally approved \$6.25 million for Project 94320 (Prince William Sound System Investigation) subject to the successful integration of this project with project #'s 94163, 94184, 94185, 94187, 94189, 94192, 94259 and those portions of projects # 94421 that involve research. The Trustees directed the Executive Director to determine which elements of this project were time-critical and to report back to the Council for further action.

Subsequently, we have been directed by the Executive Director to meet with the principals of the Sound Ecosystem Assessment (SEA) group and to develop a recommended course of action concerning this project with respect to time-critical expenditures. The following is that recommendation.

### RECOMMENDED ACTIONS

#### A. Time-critical equipment and personnel expenditures.

We recommend that the Trustee Council immediately approve the following equipment and personnel expenditures for Project # 94320:

- |   |          |
|---|----------|
| 1. Hydroacoustic equipment  | \$ 270.0 |
| 2. Physical oceanography, zooplankton and phytoplankton equipment | 310.0    |
| 3. Fish food and coded wire tags for PWSAC                        | 45.0     |

#### Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture, and Interior

4.	Juvenile salmon predation/growth/survival	
	Vessel charters	793.5
	Equipment (seines)	44.0
5.	PWSSC project administration	25.0
6.	Avian predation study startup costs	<u>41.5</u>
	SUBTOTAL	\$1,529.0
7.	PWSAC Experimental Manipulation	<u>1,750.0*</u>
	TOTAL	<b>\$3,279.0</b>

\* Authorized subject to NEPA compliance. It is anticipated that an additional \$250.0 will be needed by PWSAC to complete this portion of the project.

#### B. Procurement conditions

We recommend that the Trustee Council approve the following procedures for moving forward with the time-critical elements of this project:

1. Procurement of all equipment identified for UAF and the Prince William Sound Science Center (PWSSC) via a Reimbursable Services Agreement (RSA) between ADF&G and UAF.
2. Vessel charters competitively procured by ADF&G for the full charter period, but based on a daily charter rate, with provision for ending the contract at any time without penalty.
3. Procurement of \$1.795 million to PWSAC pending NEPA compliance, approval of sole source justification by the Alaska Department of Administration and approval of the Detailed Project Description for that portion of Project # 94320.

## DISCUSSION

The scientific questions being asked by the Prince William Sound System Investigation are laudable and appropriate in order to answer basic questions about the health of the Prince William Sound fisheries. The investigators are scientifically qualified, clear about their goals, and enthusiastic. Significant portions of the investigations proposed

as parts of project # 94320 are very ambitious, in particular, those pertaining to juvenile salmon predation. These include the purchase, delivery and implementation of highly sophisticated equipment, the coordination of several vessels and crew, as well as extremely complex field logistics in order to obtain sampling data.

Although the peer review of Detailed Project Descriptions (DPDs) for all of the component parts of project # 94320 has not yet been completed, we nevertheless feel that the recommended expenditures are justified at this time and represent a sound investment in the research capability that will be needed over the next several years.

At the same time, we emphasize that expenditure commitments (especially the salmon predation studies that require extensive vessel support) should be structured and conditioned to accommodate an initial pilot phase that demonstrates the feasibility of the proposed methods. The pilot study should be designed so that it is possible to roll in the rest of the program to full field operation upon a determination that the pilot phase is successful.

Finally, it should be emphasized that the long lead time associated with procurement and deployment of the equipment necessitates an immediate decision if large portions of the study effort are to be undertaken in the coming field season in concert with the spring plankton bloom.

Final Council action is needed as quickly as possible. Any delays will result in a reduced program.

(Note: The recommended purchases and authorizations addressed above is not a complete list of equipment needs for project # 94320 and reflects only equipment and other procurement needs with long lead times that are critical to have "in the water" by April 15.)


\* \* \* \* \*

A more detailed memorandum, including a discussion of equipment requests that are not recommended for funding at this time, is provided as an attachment.

**Exxon Valdez Oil Spill Trustee Council  
Restoration Office  
645 "G" Street, Anchorage, AK 99501  
Phone: (907) 278-8012 Fax: (907) 276-7178**

**MEMORANDUM**

**TO:** Restoration Work Force  
Carrie Holba, OSPIC  
Eric Myers  
Alex Swiderski, ADOL  
Andy Gunther, AMS

**FROM:** Molly McCammon   
Director of Operations

**DATE:** March 4, 1994

**SUBJ:** Final Reports

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The 1992-1993 Status Report indicates that final reports on 12 projects have been accepted. (See Attachment A for a list of these projects and report titles.) I want to make sure that all final reports are available at the OSPIC library and distributed to libraries in spill area communities and state and federal repository systems.

The current practice is to provide copies of final NRDA reports to Preston Thorgrimson for indexing, reproduction, and distribution. However, because NRDA studies will be concluded soon and the Restoration Office needs to be more accountable for the availability of final reports, I am proposing new procedures for submitting and distributing them.

Attachment B contains draft procedures. The main differences between the draft procedures and current practice are that final reports would be submitted to the Restoration Office instead of Preston Thorgrimson and expenses would be charged to the project itself instead of administrative overhead. Copies of the reports will continue to be sent to Preston Thorgrimson for litigation purposes. Please review these procedures and submit comments to me by March 25.

Thank you.

Attachments (3)

Attachment A  
**Final Reports: 1992 Exxon Valdez Oil Spill Restoration  
Projects**

<u>No.</u>	<u>Title</u>	<u>Agencies</u>	<u>Status</u>	<u>References</u>
ARC001	Archeological Survey	ADNR	Final report accepted.	Reger, D.R., J.D. McMahon, and C.E. Holmes. 1992. Effect of Crude Oil Contamination on Some Archaeological Sites in the Gulf of Alaska, 1991 Investigations.
B003	Murres Damage Assessment Closeout	DOI	Final report accepted.	Murres - A Perspective from Observations at Breeding Colonies. 1993.
B007	Storm Petrels Damage Assessment Closeout	DOI	Final report accepted.	Effects of Oil from the T/V Exxon Valdez Spill on Fork-Tailed Storm Petrels Breeding in the Barren Islands, Alaska. 1993.
FS027	Sockeye Salmon Overescapement	ADFG	Final report accepted.	Schmidt, D.C. and K.E. Tarbox. 1993. Sockeye Salmon Overescapement. State/Federal Natural Resource Damage assessment Status Report. FRED Technical Report 136. 65 pp.  Schmidt, D.C., J.P. Koenings, and G.B. Kyle. In press. Predator induced changes in diet vertical migration of copepods in Skilak Lake, Alaska; a hypothesis to explain the decrease in overwinter survival of juvenile sockeye salmon ( <i>Onchorhynchus nerka</i> ).
FS030	Database Management	ADFG	Final report accepted.	See DiCostanzo, C. and B.P. Simonson. 1993. Database Management. Final Report, State/Federal Natural Resource Damage Assessment. 14 pp.
MM002	Killer Whales Damage Assessment	NOAA	Final report accepted.	Frost, K. 1993. Assessment of Injury to Harbor Seals in Prince William Sound and Adjacent Areas following the EVOS.

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<u>No.</u>	<u>Title</u>	<u>Agencies</u>	<u>Status</u>	<u>References</u>
MM006	Sea Otters Damage Assessment	DOI	The results of this project will be reported in 17 documents. Six final reports have been accepted. All other reports are being revised.	<p>References for the six final reports that have been accepted:</p> <p>MM6d: Age-Specific Reproduction in Female Sea Otters from Southcentral Alaska: Analysis of Reproductive Tracts. 1993.</p> <p>MM6e: Hematology &amp; Clinical Chemistry of Sea Otters Captured in PWS following EVOS. 1993.</p> <p>MM6m: Pathological Studies of Sea Otters and Histopathologic Lesions in Sea Otters Exposed to Crude Oil. 1993.</p> <p>MM6n: Mortality of Sea Otter Weanlings in Eastern &amp; Western PWS. 1992.</p> <p>MM6p: Mortality and Reproduction of Female Sea Otters in PWS. 1992.</p> <p>MM6q: Movements of Weanling &amp; Adult Female Sea Otters in PWS After the EVOS. 1992.</p>
R047	Stream Habitat Assessment	ADFG	Final report accepted.	Kuwada, M. and K. Sundet. 1993. Stream Habitat Assessment Project: Afognak Island. Habitat and Restoration Division Technical Report No. 93-3, <i>Exxon Valdez</i> Restoration and Habitat Protection Planning. 104 pp.
ST001B	Subtidal Microbial	ADEC	Final report accepted.	Hydrocarbon Mineralization Potentials and Microbial Populations in Marine Sediments Following the EVOS. 1993
ST005	Shrimp	ADFG	Final report accepted.	Trowbridge, C. 1992. Injury to Prince William Sound Spot Shrimp. Final Report, State/Federal Natural Resource Damage Assessment. 83 pp. + appendices.

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Attachment A (cont'd)

**Final Reports: 1993 *Exxon Valdez* Oil Spill Restoration  
Projects**

<u>No.</u>	<u>Title</u>	<u>Agencies</u>	<u>Status</u>	<u>References</u>
93032	Cold Creek Pink Salmon Restoration (NEPA Compliance)	ADFG	Final report accepted.	
93059	Habitat Identification Workshop	USFS	Final report accepted.	

Attachment B  
***Exxon Valdez* Oil Spill Restoration Projects**  
**Procedures for Reproducing and Distributing Final Reports**

- 1.0 **Report Preparation.** Lead agency prepares a camera-ready copy of the final report that meets the following standards in addition to those set forth in "Format for 1991 Final Reports." (See Attachment B1.)

1.1 **Title**

- 1.11 Include on the title page the **study number**, such as "Air/Water 001" because it is the one identifier that has not changed throughout the life of the study. a uniform title that will link all of the final reports
- 1.12 Include on the title page the individual title, author and lead agency.
- 1.13 For all Natural Resources Damage Assessment (NRDA) studies include on the title page the following **uniform title** that will link all of the final reports: "*Exxon Valdez Oil Spill State/Federal Natural Resource Damage Assessment Final Reports.*"
- 1.14 For all other projects funded by the Trustee Council, include on the title page "*Exxon Valdez Oil Spill Restoration Report.*"

- 1.2 **Study History.** Each final report should include a brief history of that specific study, including the titles of any draft reports which contributed to the final report, work plans which the study was a part of, and, possibly, references to related studies.

- 1.3 **Pages.** Remove from the pages of the final report all reference to "draft," "interim," or "draft final."

- 1.4 **Margins.** The left and right margins of all pages should be at least one inch to allow for duplex printing and binding.

- 2.0 **Submission.** Lead agency submits one camera-ready copy of the final report to the *Exxon Valdez* Restoration Office along with a charge code for the project. The Restoration Office would notify the lead agency of estimates for reproducing and distributing their final reports. Deadlines:

- 2.1 For final reports that have already been accepted by the Chief Scientist, provide a camera-ready copy and charge code no later than May 1, 1994. If the report has already been distributed, provide to the Restoration Office a copy of the distribution list in addition to one camera-ready copy and a charge code. Depending on the initial condition and distribution of

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the final report, the Restoration Office may need to reproduce and distribute additional copies.

- 2.2 For final reports that have not yet been accepted, provide a camera-ready copy and charge code within 30 days of the date of the acceptance letter from the Chief Scientist.
- 2.3 The schedules and budgets of future project proposals should reflect the time and funding necessary to reproduce and distribute the final report.
- 3.0 **Reproduction.** The *Exxon Valdez* Restoration Office will have the final report reproduced commercially. Reproduction costs will be charged to the code supplied by the lead agency.
  - 3.1 Number of Copies: 34
  - 3.2 Binding. Final reports must be bound. Hard or soft binding is preferred.
- 4.0 **Distribution.** The *Exxon Valdez* Restoration Office will distribute the copies. Postage will be charged to the code supplied by the lead agency. Distribution List:
  - \*Alaska State Library (18 copies) - for distribution to the libraries in the state repository system.
  - Oil Spill Public Information Office (5 copies) - for the Administrative Record, OSPIC Reference Collection, Circulating Collection, and Interlibrary Loan.
  - Preston Thorgrimson Shidler Gates & Ellis (2 copies) - for discovery purposes.
  - Cordova Public Library (1 copy)
  - Valdez Consortium Library (1 copy)
  - Alaska Department of Environmental Conservation Library (1 copy)
  - Alaska Department of Fish & Game Habitat Division Library (1 copy)
  - Auke Bay Fisheries Lab Marine Fisheries Service Library (1 copy)
  - U.S. Fish and Wildlife Service (1 copy)
  - University of Washington Library (1 copy)
  - Time Frame (1 copy) - for reproduction upon request.
  - Clays Printing (1 copy) - for reproduction upon request.

- \* The Alaska State Library will distribute its copies to the following libraries:
  - Alaska Historical Library
  - E.E. Rasmuson Library (University of Alaska Fairbanks)
  - University of Alaska Anchorage Consortium Library
  - Library of Congress
  - Z.J. Loussac Library

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Fairbanks North Star Borough Library  
Alaska Resources Library  
Washington State Library  
Ketchikan Public Library  
Sheldon Jackson Library  
Northwest Community College Learning Resources Center  
A. Holmes Johnson Library (Kodiak)  
Kenai Community Library  
Kuskokwim Consortium Library (Bethel)  
National Library of Canada (Ottawa)  
Center for Research Libraries (Chicago)  
University of Alaska, Southeast (Juneau)

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Attachment B1  
FORMAT FOR 1991 FINAL REPORTS

Principal investigators should follow the format set out below in preparing their final reports. The reports should meet normal scientific standards of completeness and detail that would permit an independent scientific reader to evaluate the reliability and validity of the methods, data, and analyses.

1. Study Title and ID Number

2. Table of Contents, Lists of Tables, Figures, Appendices

3. Executive Summary

This should not exceed one page.

4. Introduction

Provide a short introduction to the report, including the size of the population being investigated and the general area in which field activities are being conducted.

5. Objectives

These should be the same as the objectives in the damage assessment plan. If any objectives have changed, the report should describe what has changed and why.

6. Methods

To extent the methodology differs from that described in the damage assessment plan, explain the reason for such deviation.

7. Results

This should be an objective and clear presentation of the data that have been collected. Investigators should make the presentation in a manner that will make clear to the reader the:

- a. evidence of injury found
- b. evidence that injury found was caused by the Exxon Valdez Oil Spill
- c. type of potential injury still being investigated

8. Discussion

The discussion should interpret the results and explore the meaning and significance of the findings. Where

appropriate, the relevant findings from other EVOS studies and the literature should be included in the discussions.

9. Conclusions

This should be a brief, clear statement of conclusions that apparent from the discussion.

10. Literature Cited

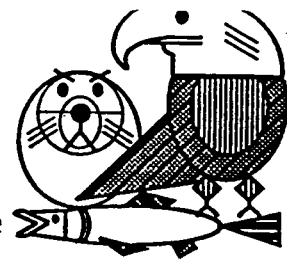
The above format is basically the standard format that is widely used in scientific papers and which all scientific investigators will find familiar. It is a well established format that has stood the test of time.

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



TO: Interested Parties

FROM: Molly McCammon, Director of Operations

DATE: March 3, 1994

SUBJ: FY 95 Work Plan Priority Survey

Even while the Trustee Council only recently took action on the FY 94 Work Plan, efforts are underway regarding the FY 95 Work Plan. The purpose of this memorandum and the attached survey form is to ask for your assistance with the identification of key recovery monitoring priorities as well as other research or general restoration project priorities for use in development of the FY 95 Work Plan.

A working draft timeline of the FY 95 Work Plan process is attached. As you will note from this draft timeline, this initial solicitation to help identify priorities is just one preliminary step among many additional opportunities for comment that will be used to help formulate the FY 95 Work Plan. In addition to reviewing prior year project suggestions, we want to use this survey as a means of obtaining current perspectives on priorities for the FY 95 work effort from the Public Advisory Group members, the Trustee agencies, scientific peer reviewers and others. (Please note that this survey is designed to help provide guidance regarding Monitoring/Research and General Restoration strategies. Proposals or projects concerning Habitat Protection/Acquisition are being addressed through a separate process.)

**A survey form is attached for your use. Please return this survey by March 17 (Thursday) to the EVOS Restoration Office (645 G Street, Anchorage, Alaska, 99501).** If you have questions, please contact Bob Loeffler or Eric Myers in the Restoration Office.

attachments

cc: Public Advisory Group  
Restoration Work Force  
Bob Spies/Chief Scientist  
Jim Ayers

**DRAFT**

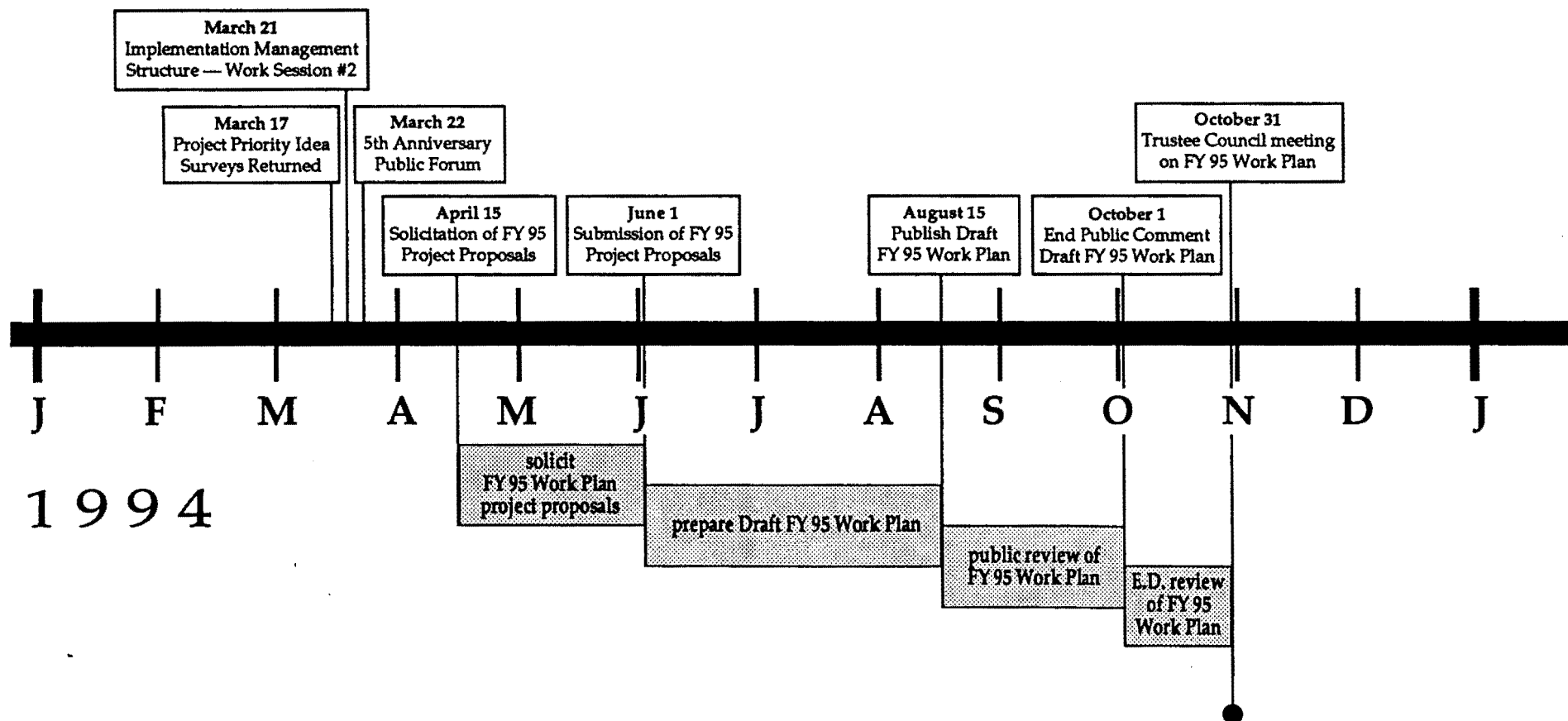
# TIMELINE

## FY 95 Work Plan

### Development

### Process

March 1	Deadline: Comment from Restoration Work Force/FY 95 Priority Project Survey
March 3	Distribution of FY 95 Project Priority Idea Survey
March 9	Restoration Work Force meeting on FY 95 Work Plan Process (teleconference)
March 17	Deadline: FY 95 Project Priority Idea Surveys returned to Restoration Office
March 21	Implementation Management Structure work session #2
March 22	5th Anniversary Public Forum
March 23	Work session w/ Chief Scientist, others re: FY 95 Priority Projects (tentative)
April 15	Distribution of FY 95 Proposal Guidance Packet
June 1	Deadline: Submission of FY 95 project proposals
June 1 - Aug 15	Prepare Draft FY 95 Work Plan
Aug 15	Publish Draft FY 95 Work Plan
Aug 15 - Oct 1	Public comment/PAG review/Chief Scientist recommendation on FY 95 projects
Oct 1 - Oct 30	Development of Executive Director recommendation on FY 95 Work Plan
Oct 31	Trustee Council action on FY 95 Work Plan



# SURVEY FORM

## FY 95 Restoration Work Plan Priorities

### 1. Recovery Monitoring Priorities for FY 95

The *Draft Restoration Plan* identified the recovery status of injured resources and services as of November 1993 (see Table B-1, copy attached). General policy guidance regarding recovery monitoring is provided in Chapter 4 of the *Draft Restoration Plan* with consideration given to the recovery status of injured resources and services.

With regard to each of the resources or services that you identify as in need of further recovery monitoring (see pages 3 and 4 of the survey), several basic questions should be addressed:

- Is it necessary to monitor in FY 95?
- If so, why? What kind of monitoring is needed?
- What important data or information would be lost as a consequence of not monitoring in FY 95? (That is, could the data that would be collected in FY 95 essential to determining recovery status or could monitoring be deferred and still be useful?)
- Would monitoring provide information important to understanding related ecosystem issues or concerns?
- For each resource or service in need of monitoring, how frequently should it occur (i.e., each year, once every five years, etc.)?
- How would you describe the need for monitoring in FY 95? (5 = high priority 3 = medium priority 1 = low priority)

*continued ...*

PLEASE NOTE: This survey is intended to provide assistance with the identification of priority Monitoring/Research and General Restoration project ideas for FY 95 apart from Habitat Protection/Acquisition efforts that are being addressed through a separate process.

This survey form is designed to provide you with a format to help you answer the questions posed. Please use additional paper to provide information as needed. If you have questions, please contact Bob Loeffler or Eric Myers at the EVOS Restoration Office [tel: (907) 278-8012 fax: (907) 276-7178].

**Please return this survey by March 17 (Thursday) to:**  
EVOS Restoration Office • 645 G Street • Anchorage, AK • 99501

## 2. Research Priorities for FY 95

Based on your understanding of the status of injury and recovery of the various injured resources and services are there certain hypotheses or key research questions that you feel are especially important to address in FY 95 in order to advance restoration goals and objectives? (For example, during formulation of the FY 94 Work Plan, broad-based support emerged for examination of the relationship of forage fish to various injured resources. There was also widespread recognition of the importance of continuing work on questions pertaining to what may be persistent genetic effects in pink salmon.)

Please list and describe your research priorities in terms of what questions or concerns should be addressed.

## 3. General Restoration Priorities for FY 95

Are there any general restoration projects that you consider to be a priority for the FY 95 Work Plan? For each general restoration project, discuss why the project is needed in terms of the recovery status of the related injured resource(s).

## 4. Continuation Projects in FY95

Please identify on-going projects that will need continued funding in FY 95. For those projects, identify what impacts would result if the project were not continued in FY 95.

## 5. Top Three Priority Projects or Concerns

Of all the projects and concerns that you have identified for FY 95, please identify what you consider to be the top three priority projects or concerns:

INJURED RESOURCE/SERVICE	Recovery Monitoring — Priorities for FY 95			Page 3
<u>Recovering Biological Resources</u>	Monitoring Needed in FY 95? (Y/N)	Priority of Monitoring in FY 95? (1 - 5)	Frequency of Monitoring Needed?	Why is it important to monitor? What kind of monitoring is needed? What important information or data would be lost as a result of not monitoring in FY 95?
a. Bald eagles				
b. Black Oystercatchers				
c. Sockeye salmon (Red Lake)				
d. Killer whales				
<u>Biological Resources Not Recovering</u>				
e. Pink salmon				
f. Sockeye salmon (Kenai River)				
g. Marbled murrelets				
h. Common murre				
i. Pigeon guillemots				
j. Harbor seals				
k. Sea otters				
l. Harlequin ducks				
m. Intertidal ecosystem				
n. Subtidal ecosystem				
o. Pacific herring				

INJURED RESOURCE/SERVICE	Recovery Monitoring — Priorities for FY 95			Page 4
<u>Biological Resources/Recovery Unknown</u>	Monitoring Needed in FY 95? (Y/N)	Priority of Monitoring in FY 95? (1 - 5)	Frequency of Monitoring Needed?	Why is it important to monitor? What kind of monitoring is needed? What important information or data would be lost as a result of not monitoring in FY 95?
p. Clams				
q. Cutthroat trout				
r. River otter				
s. Dolly varden				
t. Rockfish				
<u>Other Natural Resources</u>				
u. Archeological resources				
v. Designated wilderness				
<u>Injured Services</u>				
w. Commercial fishing				
x. Subsistence				
y. Recreation and tourism				
z. Passive use				

Please identify the person who completed this survey.	NAME: _____
	ORGANIZATION: _____
	ADDRESS: _____
	PHONE: _____

**Table B-1 List of Injured Resources and Lost or Reduced Services**

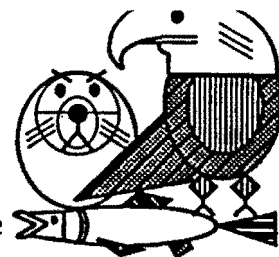
INJURED RESOURCES			LOST OR REDUCED SERVICES (Human Uses)
BIOLOGICAL RESOURCES		OTHER	
<b>Recovering</b> Bald eagle Black oystercatcher Intertidal organisms (some) Killer whale Sockeye salmon (Red Lake) Subtidal organisms (some)	<b>Not Recovering</b> Common murre Harbor seal Harlequin duck Intertidal organisms (some) Marbled murrelet Pacific herring Pigeon guillemot Pink salmon Sea otter Sockeye salmon (Kenai River) Subtidal organisms (some)	Archaeological resources Designated Wilderness Areas	Commercial fishing Passive uses Recreation and Tourism including sport fishing, sport hunting, and other recreation uses Subsistence
<b>Recovery Unknown</b> Clams Cutthroat trout Dolly Varden River otter Rockfish			

# Exxon Valdez Oil Spill Restoration Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



TO: Bob Spies, Chief Scientist  
FROM: Eric Myers, Restoration Project Coordinator  
DATE: March 3, 1994  
SUBJ: DPD for Project # 94191 (Oil Related Egg and Alevin Mortality)

Enclosed is a copy of the DPD for Project # 94191 (Oil Related Egg and Alevin Mortality).

As I believe you are aware, this project has been identified as a time-critical project in need of expedited peer review and approval.

Please let me know as soon as possible what you think is realistic in terms of review and approval timing.

Thanks.

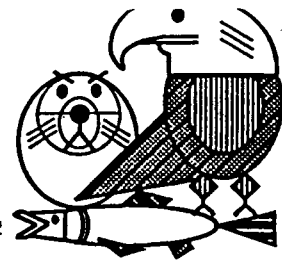
cc: Molly McCammon (w/o attachment)  
Joe Sullivan (w/o attachment)

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



TO: Bob Spies, Chief Scientist  
FROM: Eric Myers, Restoration Project Coordinator  
DATE: March 3, 1994  
SUBJ: DPDs for Project # 94320 — PWSAC Projects

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Enclosed are copies of the two DPDs for the PWSAC projects within Project # 94320 (PWS System Investigation):

PWSAC — Experimental Manipulation	\$1.5 million
PWSAC — Experimental Fry Release	\$ 45.0 K

Please let me know if you have any questions concerning these DPDs.

Thanks.

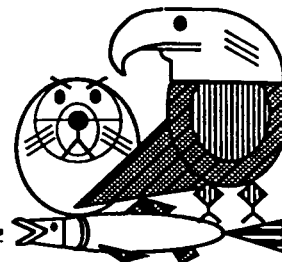
cc: Molly McCammon (w/o attachments)  
Joe Sullivan (w/o attachments)

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



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## MEMORANDUM

To: Restoration Work Force

From: Molly McCammon  
Director of Operations

Date: March 3, 1994

Subj: Update on Assignments and Activities

My apologies, this memo has been in draft form for weeks now--and continuously updated. I promise to do better--and will try to send an up-date out weekly.

1. Project 320 - Ecosystem Study Plan. Byron Morris, Jerome Montague, Bob Spies, and Alex Wertheimer have been working with Dr. Ted Cooney and others to first, determine time-sensitive elements of the package, and second, to analyze the overall package with these elements in mind: equipment needs and methodology (hydroacoustics), indirect costs and administrative overhead, database management and modeling. Bob Spies has the lead. Eric Myers has the lead on ensuring the hatchery reserve project is adequately described and complies with NEPA. A final decision on the time-sensitive elements is expected Friday, March 4.
2. Procedures for 1994 Projects - Bob and Eric were assigned to revise the Detailed Project Description form and to draft letters to go to the agencies and P.I.s, detailing the steps for peer review of detailed project descriptions. This was accomplished on February 8. All time-sensitive projects should get their DPDs in as soon as possible if you want a timely peer-review.
- \* PLEASE NOTE!  
3. Court Request - All budget revisions are due in to Mark Brodersen Friday, March 4 by 5 p.m. This is the ABSOLUTE DEADLINE since the court request is to be filed next week.
4. Communications - The 5th Anniversary Forum, entitled "Five Years Later: What Have We Learned," is scheduled by March 22 in Anchorage, with smaller road shows in the spill communities in April. Molly, L.J. Evans, Sandy Rabinowitch, and Bruce Wright constitute the planning group for the forum. A draft agenda has been prepared and is attached. Additionally, a status report on injuries and activities is being developed for distribution as part of this forum. A newsletter should be out by next week.
5. Implementation Management Structure - Bob Loeffler and Eric Myers are still moving forward on this project by 1) incorporating comments into a revised version of the

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Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation

United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

January 13-14 document, 2) developing a proposed process for annual work plans, and 3) pulling materials together for the next work session. Mark Brodersen and Bob Loeffler have been tasked with developing a Scientific Review Board.

6. Project 199 - Institute of Marine Science. At our February 1 Work Force meeting, Jim reiterated that the Trustees' motion was to approve funding the project, although the exact amount to be funded by the Trustees is still to be determined, and a number of tasks still need completion. Fifty-thousand dollars (\$50,000) was approved to aid in completion of these tasks, which include compliance with NEPA. Kim Sundberg of ADF&G has been tasked as project coordinator. Minerals Management Service has the federal lead on the EIS. Kim is continuing work with the agencies and the university to ensure that the project is integrated with existing facilities and functions. A scientific work group is being formed to help with the planning and design for the next phase of the project.
7. Projects 110 and 126 - Habitat Protection. The Trustees gave Jim the go ahead with detailed negotiations. He will be working with the Management Information Group (formerly the Habitat staff) to develop a standardized appraisal process, review the large parcel rankings as part of developing a strategic package with geographic balance, as well as implement the other directions included as an attachment to this project. Jim pointed out that the Trustees clarified that this process does not preclude any acquisition due to imminent threat or opportunity so long as there is a balanced approach. Dave Gibbons and Carol Fries have the lead on the standardized appraisal process. Dave Gibbons is the lead Restoration Work Force staff for negotiations.
8. NEPA Projects - Five projects still require NEPA compliance before further Trustee approval. The responsible agencies have all been notified, and work is underway. Bob Loeffler is in charge of ensuring that NEPA compliance is fulfilled.
9. Hatchery Funding - Molly was assigned to work with Alex Swiderski on attempting to obtain legal opinions on hatchery funding. A copy of the PWSAC legal opinion was distributed.
10. Information and Data Management - The goal is to review all the information management systems and ideas, and figure out what makes the most sense for EVOS data. A working group composed of Jess Grunblatt, Carol Fries, Carrie Holba, and Andy Gunther has been assigned to first assess agency and Trustee needs and interests, and then to prepare a recommended plan of action.
11. Administration Budget - The Admin. Budget is now finalized, and copies will be sent to all the agency liaisons. Mark Brodersen is in charge.
12. Administration - June Sinclair is reviewing the GAO audit, the Trustee's financial operating procedures and past reports and statements with the goal of clarifying financial tracking.

MM/raw

Draft as of 3/3/94 - All of these are working titles

**Exxon Valdez Oil Spill Forum  
March 22, 1994  
Regal Alaskan Hotel, Anchorage**

**Five Years Later:  
What have we learned?**

***Sponsored by the Exxon Valdez Oil Spill Trustee Council***

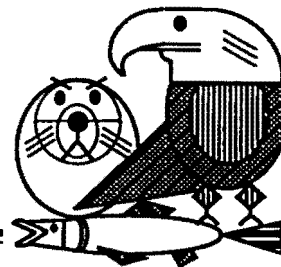
- 1:00 - 1:05 Call to order & welcome ..... Jim Ayers
- 1:05 - 1:15 Looking Back: March 24, 1989/Slide Program
- 1:15 - 1:20 Welcome and introductions ..... Jim Ayers
- 1:20 - 1:35 Statement from Governor Hickel
- 1:35 - 1:50 Statement from President Clinton (Presented by a representative  
from Department of the Interior)
- 1:50 - 2:20 Keynote speaker: How does the ..... George Rose  
Exxon Valdez oil spill fit into the big picture?
- 2:20 - 2:35 Why are we here today? ..... Steve Pennoyer
- Break 2:35 - 2:45 Break
- 2:45 - 3:00 Overview of research & monitoring: ..... Bob Spies
- 3:00 - 3:15 Nearshore Ecosystem: ..... Pete Peterson
- 3:15 - 3:30 Toxicology & Distribution of Oil: ..... Stanley Rice
- 3:30 - 3:45 Subsistence: ..... Jim Fall
- 3:45 - 4:00 Archaeology: ..... Ted Birkedal
- 4:00 - 4:15 Fish: ..... Phil Mundy
- 4:15 - 4:30 Marine Mammals: ..... Kathy Frost
- 4:30 - 4:45 Birds: ..... Dave Irons
- 4:45 - 5:15 Where do we go from here?: ..... Jim Ayers
- 5:15 - 7:00 Social Hour: Meet the scientists and the Trustees

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 G Street, Suite 402, Anchorage, Alaska 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## FAX COVER SHEET

To: RWF Number: \_\_\_\_\_

From: Molly McCammon Date: 3-3-94

Comments: \_\_\_\_\_ Total Pages: 4

To the Restoration Work Force

Please deliver to!

Dave Gibbons Tony DeGange

Ray Thompson Carol Fries

Mark Brodersen

David Bruce

Jerome Montague

Joe Sullivan

Byron Morris

Bruce Wright

Sandy Rabinowitch

Leslie Bartels

**FAX COMPLETE**

Trustee Agencies

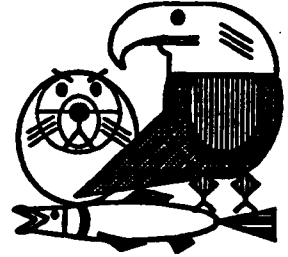
State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



March 3, 1994

Dear Friend,

On January 13th and 14th, we held a discussion of an ecosystem-based management strategy for the *Draft Restoration Plan* prepared by the *Exxon Valdez* Oil Spill Trustee Council. We would like you to participate in the continuation of that discussion on March 21st. On March 22nd the Trustee Council is sponsoring The *Exxon Valdez* Oil Spill Forum, "Five Years Later: What have we learned?" from 1-5 P.M. at the Regal Alaskan Hotel. On March 23rd, we are tentatively setting up a work session on monitoring, research, and general restoration priorities to provide direction for the Draft 1995 Work Plan.

As with the first discussion, the meeting will occur in the *Exxon Valdez* Oil Spill Restoration Office, 4th floor large conference room, 645 G Street, Anchorage, and will begin at 8:30 A.M. This work session will continue the effort begun in January, but it will focus on applying the conclusions reached at the first meeting to the 1995 Work Plan process. We expect the first day to focus mostly on issues related to the work plan process.

I am including two attachments. The first attachment is a revised set of notes from the January work session. The revisions were based on comments received on the draft notes distributed after the meeting. The second attachment is a survey asking for your priorities for the FY 95 work Plan. Please return the survey by March 17th. We will collate them and have a summary ready for discussion at the work session.

In the next few weeks, we will send out a more complete description of the draft work plan process for your review, and an agenda for the meeting. Please contact Rebecca Williams at 278-012 if you will be able to attend this session. I look forward to your participation.

Sincerely,

A handwritten signature in black ink that reads "Molly McCammon". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Molly McCammon  
Director of Operations

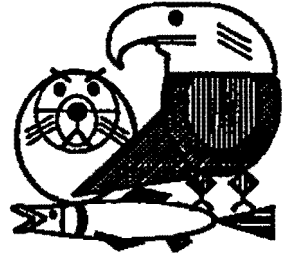
Attachments

# **Exxon Valdez Oil Spill Trustee Council**

**Restoration Office**

**645 "G" Street, Anchorage, AK 99501**

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



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March 3, 1994

## **Meeting Notes January 13 & 14, 1994 Work Session on Ecosystem-based Management Structure**

Mission Statement  
Definitions  
Guiding Principles  
Injured Resources and Services, and Ecosystem  
Goals and Objectives  
Management Goals and Objectives

Attachment 1  
Attachment 2  
Attachment 3  
  
Attachment 4  
Attachment 5

In January, we distributed draft notes and asked for review and suggestions. These revised notes include changes based on the suggestions we received. Some of the most important changes are: the Guiding Principles are grouped into categories for better communication and understanding, ecosystem definitions are provided for the three ecosystem types, and background information is provided that puts the goals and objectives into perspective.

ATTACHMENT 1

## MISSION STATEMENT

The mission of the Trustee Council and all participants in Council efforts is to efficiently restore the environment injured by the *Exxon Valdez* oil spill to a healthy, productive, world renown ecosystem, while taking into account the importance of the quality of life and the need for viable opportunities to establish and sustain a reasonable standard of living.

The restoration will be accomplished through the development and implementation of a comprehensive, interdisciplinary recovery and rehabilitation program that includes:

- Natural Recovery
- Monitoring and Research
- Resource and Service Restoration
- Habitat Acquisition and Protection
- Resource and Service Enhancement
- Replacement
- Meaningful Public Participation
- Project Evaluation
- Fiscal Accountability
- Efficient Administration

— adopted by the *Exxon Valdez* Oil Spill Trustee Council November 30, 1993

ATTACHMENT 2

**GOAL**

A mental concept of what you want.

**OBJECTIVE**

Pertaining to a material or measurable specific object (as distinguished from a mental concept).

**STRATEGY**

Activity or expenditure that is directed toward accomplishment of an objective (i.e., who, what, where, when, how).

**CATEGORY OF RESTORATION STRATEGY**

- Monitoring and Research
- Habitat Protection
- General Restoration

**STRATEGY TIMELINE AND COSTS**

ATTACHMENT 3

**GUIDING PRINCIPLES**

General Principles

1. Restoration should contribute to a healthy, productive and biologically diverse ecosystem within the spill area that supports the services necessary for the people who live in the area.
2. Restoration will take an ecosystem approach to better understand what factors control the populations of injured resources.

Principles that Focus on Direct Restoration Activities

3. Restoration will focus upon injured resources and services and will emphasize resources and services that have not recovered. Resources and services will be enhanced, as appropriate, to promote restoration. Restoration actions may address resources for which there was no documented injury if these activities will benefit an injured resource or service.
4. Resources and services not previously identified as injured may be considered for restoration if reasonable scientific or local knowledge obtained since the spill indicates a spill-related injury.
5. Projects designed to restore or enhance an injured service:
  - must have a sufficient relationship to an injured resource,
  - must benefit the same user group that was injured, and
  - should be compatible with the character and public uses of the area.
6. Restoration activities will occur primarily within the spill area. Limited restoration activities outside the spill area, but within Alaska, may be considered under the following conditions:
  - when the most effective restoration actions for an injured population are in a part of its range outside the spill area, or
  - when the information acquired from research and monitoring activities outside the spill area will be significant for restoration or understanding injuries within the spill area.

Principles Concerning Integration of Restoration Activities

7. Restoration will include a synthesis of findings and results, and will also provide an indication of important remaining issues or gaps in knowledge.
8. Restoration shall take advantage of cost sharing opportunities where effective.
9. Restoration should be guided and reevaluated as information is obtained from damage assessment studies and restoration actions.

Public Participation Principles

10. Restoration must include a meaningful public participation process at all levels — planning, project design, implementation and review.
11. Restoration must reflect public ownership of the process by timely release and reasonable access to information and data.

Principles concerning the Design of Restoration Projects

12. Proposed restoration strategies should state a clear, measurable and achievable end point.
13. Restoration must be conducted as efficiently as possible, reflecting a reasonable balance between costs and benefits.

Principles to Help Establish Priorities for Restoration Activities

14. Priority will be given to restoring injured resources and services which have economic, cultural and subsistence value to people living in the oil spill area, as long as this is consistent with other principles.
15. Possible negative effects on resources or services must be assessed in considering restoration projects.
16. Priority shall be given to strategies that involve multi-disciplinary, interagency or collaborative partnerships.
17. Restoration projects will be subject to open, independent scientific review before Trustee Council approval.
18. Past performance of the project team should be taken into consideration when making funding decisions on future restoration projects.
19. Competitive proposals for restoration projects will be encouraged.
20. Government agencies will be funded only for restoration projects that they would not have conducted had the spill not occurred.

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These Guiding Principles reflect and elaborate on the Policies identified in Chapter 2 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993). Further guidance regarding the categories of restoration action — General Restoration, Habitat Protection and Acquisition, Monitoring and Research, and Public Information and Administration — are provided in Chapter 3 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993).

Attachment 4

This attachment organizes information on injuries and restoration according to general ecosystem types within the spill area, identifies resources and services injured by the spill, and provides a statement of goals and objectives for those resources and services.

**Resources and services injured by the spill.** The list of injured resources and services is taken from Appendix B of the Draft Exxon Valdez Oil Spill Restoration Plan (November 1993). As a result of the January 13-14 work session, the information was modified by subdividing some resource categories:

- "mussels" was made its own category rather than being included in "intertidal organisms," and
- "intertidal ecosystem" and "subtidal ecosystem" were subdivided into "organisms" and "sediments."

In order to make the ecosystem context more apparent, each resource and service is shown according to where it exists in the ecosystem: pelagic (offshore), near-shore, or upland ecosystem.

**Goals.** Draft goals are provided for each of the three parts of the ecosystem.

**Objectives.** Objectives are statements that pertain to a measurable, specific object (as distinguished from a mental concept). They are given for each injured resource and service, and are taken from definitions of recovery in Chapter 4 of the Draft Restoration Plan.

**Ecosystem Definitions.** The three ecosystem types described below are not intended to have hard-and-fast, legally definable boundaries. Rather, they are intended to describe areas that generally contain similar biological and physical features that influence the relationships of the resources that exist there and the services they support.

***Pelagic Ecosystem.*** The deeper, open water region offshore that is not directly affected by wave action, terrestrial runoff, or other near-shore processes. Examples are the center of Prince William Sound and a few hundred yards beyond the steep cliffs and fiord mouths of the outer Kenai coast.

***Near-shore Ecosystem.*** Terrestrial and aquatic areas dominated by near-shore processes such as tidal movement, salt spray, intertidal and shoreline vegetation, wave action, and terrestrial runoff. Near-shore areas include the intertidal zone, salt marshes, and beach areas where salt and shoreline processes dominate, as well as shallower offshore waters that are greatly influenced by near-shore processes. It also includes narrow fjords and channels that occur in the spill area.

***Upland Ecosystem.*** The area of land and water uphill of the near-shore ecosystem.

**INJURED RESOURCE — ECOSYSTEM MATRIX**

	<b>ECOSYSTEM</b>		
	<u>Pelagic (Off-shore)</u>	<u>Near-shore</u>	<u>Upland</u>
Harbor seal	X	X	
Sea otter		X	
Killer whale	X		
Sockeye salmon	X	X	X
Cutthroat trout		X	X
Dolly Varden		X	X
Rockfish	X	X	
Pacific herring	X	X	
Pink salmon	X	X	X
Common murre	X	X	
Harlequin duck		X	X
Marbled murrelet	X	X	X
Pigeon guillemot		X	
Bald eagle		X	X
Black oystercatcher		X	X
River otter		X	X
Clams		X	
Mussels		X	
Intertidal organisms		X	
Subtidal organisms	X	X	
Sediments	X	X	
<u>Other Resources</u>			
Archeological Resources		X	X
Designated Wilderness		X	X

ATTACHMENT 4 (continued)

**INJURED RESOURCES**

**Pelagic (Off-shore) Ecosystem**

Sockeye salmon  
Pink salmon  
Pacific herring  
Rockfish  
Killer whale  
Harbor seal

Common murre  
Marbled murrelet  
  
Subtidal organisms  
Sediments

**Near-shore Ecosystem**

Sockeye salmon  
Pink salmon  
Cutthroat trout  
Dolly Varden  
Pacific herring  
Harbor seal  
Sea otter  
Clams  
Mussels  
Pigeon guillemot  
Rockfish

Bald eagle  
Harlequin duck  
Black oystercatcher  
River otter  
Intertidal organisms  
  
Subtidal organisms  
  
Marbled murrelet  
Sediments  
Common murre

Archaeologic resources

Designated wilderness areas

**Upland Ecosystem**

Sockeye salmon  
Pink salmon  
Cutthroat trout  
Dolly Varden

Harlequin duck  
Marbled murrelet

Bald eagle  
Black oystercatcher

River otter

Archeological resources

Designated wilderness areas

**LOST OR REDUCED SERVICES**

Commercial fishing  
Recreation/Tourism

Passive uses  
Subsistence

## GOALS

**Pelagic (Off-shore) Ecosystem:** A healthy, productive, pelagic (off-shore) ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

**Near-shore Ecosystem:** A healthy, productive, near-shore ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

**Upland Ecosystem:** A healthy, productive, upland ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

## OBJECTIVES

(In the table below, the first column shows the ecosystem to which the objective applies: P=pelagic (off-shore) ecosystem, N=near-shore ecosystem, and U=upland ecosystem.)

The overall goal of restoration is recovery of all injured resources and services. Ecosystem goals are described above. This section defines objectives as measures of recovery to meet the overall restoration goal and ecosystem goals. For some resources, little is known about the extent of injury and recovery, so it is difficult to define recovery or develop restoration strategies.

In general, resources and services will have recovered when they return to conditions that would have existed had the spill not occurred. Because it is difficult to predict conditions that would have existed in the absence of the spill, recovery is often defined as a return to prespill conditions. For resources that were in decline before the spill, like marbled murrelets, recovery may consist of stabilizing the population at a lower level than before the spill.

Where little prespill data exists, injury is inferred from comparison 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 for recovery based on these differences are often less certain than in those cases where prespill data exist. However, there can also be some uncertainty associated with interpreting the significance of prespill population data since populations undergo natural fluctuations. 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.

### Natural Resources

- N, U     **Bald Eagle:** Bald eagle population and productivity comparable to prespill levels.
  
- N, U     **Black Oystercatchers:** Populations that attain pre-spill levels, and reproduction and growth rates in oiled areas that are comparable to those in unoiled areas.
  
- N         **Clam:** Clam populations and productivity that are at prespill levels.
  
- P, N     **Common Murre:** Prespill populations and fledgling productivity of common murrees at all injured colonies.
  
- P, N, U   **Cutthroat Trout and Dolly Varden Trout:** Growth rates and survival for cutthroat trout and Dolly Varden trout within oiled areas that are comparable to those for unoiled areas.
  
- N, U     **Harbor Seal:** Population trends in harbor seals that are stable or increasing.
  
- N, U     **Harlequin Ducks:** For harlequin ducks, prespill populations or when differences between oiled and unoiled areas are eliminated.
  
- N         **Intertidal Organisms:** For each intertidal elevation (lower, middle, and upper), community composition, age class distribution, population abundance of component species, and ecosystem functions and services at levels that would have prevailed in the absence of the oil spill.
  
- P         **Killer Whale:** Recovery of the injured AB killer whale pod to the 1988 level (of 36 individuals).
  
- P, N, U   **Marbled Murrelet:** Population trends in marbled murrelets that are stable or increasing.
  
- N         **Mussel:** Mussel populations and productivity which are at prespill levels, and which do not contain oil that contaminates higher trophic levels.
  
- P, N     **Pacific Herring:** Populations of pacific herring that are healthy and productive and exist at prespill abundances.
  
- P, N     **Pigeon Guillemot:** Population trends in pigeon guillemots that are stable or increasing.
  
- P, N, U   **Pink Salmon:** Populations of pink salmon that are healthy and productive and exist at prespill abundances. (An indication of recovery is when egg mortalities in oiled areas match prespill levels or levels in unoiled areas.)

- N, U      **River Otters:** For river otters, population levels are unknown but indications of recovery are when use and physiological indices have returned to prespill conditions.
  
- P          **Rockfish:** Populations of rockfish levels are unknown, but indications of recovery are when habitat use and physiological indices have returned to prespill conditions.
  
- N, U      **Sea Otter:** A population abundance and distribution of sea otters comparable to prespill abundance and distribution, and when all ages appear healthy.
  
- P, N      **Sediments:** Sediments whose contamination, if any, causes no negative effects to the spill-affected ecosystem.
  
- P, N, U   **Sockeye Salmon (Kenai River):** Population of sockeye salmon (Kenai River) that is healthy, and productive and exists at prespill levels. (One indication of recovery is when Kenai and Skilak Lakes support sockeye smolt outmigrations comparable to prespill levels.)
  
- P, N, U   **Sockeye Salmon (Red Lake):** Population of sockeye salmon (Red Lake) that is healthy, productive, and exists at prespill levels in Red Lake.
  
- P, N      **Subtidal Organisms:** For subtidal organisms, community composition, population abundance and age distribution of component species, and ecosystem functions and services in each injured subtidal habitat that have returned to levels that would have prevailed in the absence of the oil spill.

### Other Resources

- N, U      **Archaeological Resources:** For archaeological resources, an end to spill-related injury including looting and vandalism rates that are at or below prespill levels.
  
- N, U      **Designated Wilderness Areas:** Designated wilderness areas where oil is no longer encountered, and when the public perceives them to be recovered from the spill.

### Services

**Subsistence:** Subsistence resources that are healthy and productive and exist at prespill levels, and people that are confident that the resources are safe to eat. (One indication that recovery has occurred is when the cultural values provided by gathering, preparing, and sharing food are reintegrated into community life.)

**Commercial Fishing:** 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.

**Recreation and Tourism:** Recreation and tourism fish and wildlife resources that are recovered; recreation use of oiled beaches that is no longer impaired, and management capabilities and facilities that can accommodate spill-related changes in human use.

**Passive Use:** A public that perceives that aesthetic and intrinsic values associated with the spill area are no longer diminished by the oil spill.

Attachment #5

## **MANAGEMENT PROCESSES**

This attachment lists a goal and four objectives for management processes.

### **GOAL**

A long-term, comprehensive and cost-effective restoration program comprised of integrated strategies that are a balanced combination of Monitoring and Research, Habitat Protection and General Restoration.

### **OBJECTIVES**

**Administration:** Administrative costs that average no more than five percent of overall restoration expenditures over the remainder of the settlement period.

**Integrated Research and Monitoring :** A research and monitoring program that coordinates project development and design with goals and objectives; appropriately reflects and addresses ecosystem relationships; and ensures that collected data will be readily available and accessible to resource managers, policy makers and the general public.

**Information Management:** Information that is available in a timely manner and useable format to scientists, managers and the public.

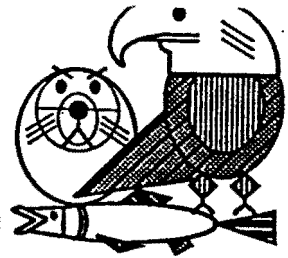
**Communication:** A public involvement program that provides information and an opportunity for meaningful involvement in all levels of restoration — planning, project design, implementation, and review.

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



TO: Interested Parties

FROM: Molly McCammon, Director of Operations *W*

DATE: March 3, 1994

SUBJ: FY 95 Work Plan Priority Survey

Even while the Trustee Council only recently took action on the FY 94 Work Plan, efforts are underway regarding the FY 95 Work Plan. The purpose of this memorandum and the attached survey form is to ask for your assistance with the identification of **key recovery monitoring priorities as well as other research or general restoration project priorities** for use in development of the FY 95 Work Plan.

A working draft timeline of the FY 95 Work Plan process is attached. As you will note from this draft timeline, this initial solicitation to help identify priorities is just one preliminary step among many additional opportunities for comment that will be used to help formulate the FY 95 Work Plan. In addition to reviewing prior year project suggestions, we want to use this survey as a means of obtaining current perspectives on priorities for the FY 95 work effort from the Public Advisory Group members, the Trustee agencies, scientific peer reviewers and others. (Please note that this survey is designed to help provide guidance regarding Monitoring/Research and General Restoration strategies. Proposals or projects concerning Habitat Protection/Acquisition are being addressed through a separate process.)

**A survey form is attached for your use. Please return this survey by March 17 (Thursday) to the EVOS Restoration Office (645 G Street, Anchorage, Alaska, 99501).** If you have questions, please contact Bob Loeffler or Eric Myers in the Restoration Office.

attachments

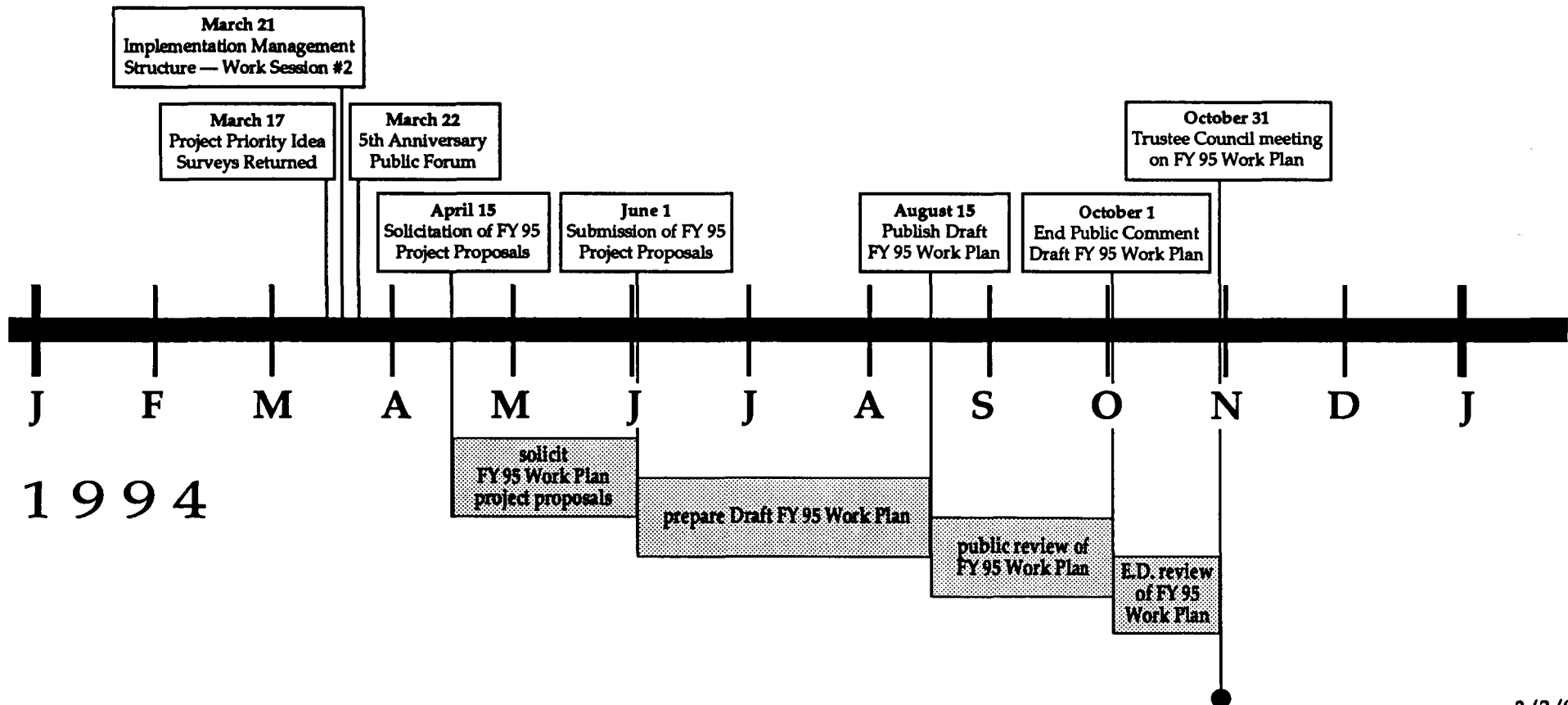
cc: Public Advisory Group  
Restoration Work Force  
Bob Spies/Chief Scientist  
Jim Ayers

# TIMELINE

## FY 95 Work Plan Development Process

# DRAFT

March 3	Distribution of FY 95 Project Priority Idea Survey
March 17	Deadline: FY 95 Project Priority Idea Surveys returned to Restoration Office
March 21	Implementation Management Structure work session #2
March 22	5th Anniversary Public Forum
March 23	Work session w/ Chief Scientist, others re: FY 95 Priority Projects (tentative)
April 15	Distribution of FY 95 Proposal Guidance Packet
June 1	Deadline: Submission of FY 95 project proposals
June 1 - Aug 15	Prepare Draft FY 95 Work Plan
Aug 15	Publish Draft FY 95 Work Plan
Aug 15 - Oct 1	Public comment/PAG review/Chief Scientist recommendation on FY 95 projects
Oct 1 - Oct 30	Development of Executive Director recommendation on FY 95 Work Plan
Oct 31	Trustee Council action on FY 95 Work Plan



# SURVEY FORM

## FY 95 Restoration Work Plan Priorities

### 1. Recovery Monitoring Priorities for FY 95

The *Draft Restoration Plan* identified the recovery status of injured resources and services as of November 1993 (see Table B-1, copy attached). General policy guidance regarding recovery monitoring is provided in Chapter 4 of the *Draft Restoration Plan* with consideration given to the recovery status of injured resources and services.

With regard to each of the resources or services that you identify as in need of further recovery monitoring (see pages 3 and 4 of the survey), several basic questions should be addressed:

- Is it necessary to monitor in FY 95?
- If so, why? What kind of monitoring is needed?
- What important data or information would be lost as a consequence of not monitoring in FY 95? (That is, could the data that would be collected in FY 95 essential to determining recovery status or could monitoring be deferred and still be useful?)
- Would monitoring provide information important to understanding related ecosystem issues or concerns?
- For each resource or service in need of monitoring, how frequently should it occur (i.e., each year, once every five years, etc.)?
- How would you describe the need for monitoring in FY 95? (5 = high priority 3 = medium priority 1 = low priority)

*continued ...*

PLEASE NOTE: This survey is intended to provide assistance with the identification of priority Monitoring/Research and General Restoration project ideas for FY 95 apart from Habitat Protection/Acquisition efforts that are being addressed through a separate process.

This survey form is designed to provide you with a format to help you answer the questions posed. Please use additional paper to provide information as needed. If you have questions, please contact Bob Loeffler or Eric Myers at the EVOS Restoration Office [tel: (907) 278-8012 fax: (907) 276-7178].

**Please return this survey by March 17 (Thursday) to:**  
EVOS Restoration Office • 645 G Street • Anchorage, AK • 99501

**2. Research Priorities for FY 95**

Based on your understanding of the status of injury and recovery of the various injured resources and services are there certain hypotheses or key research questions that you feel are especially important to address in FY 95 in order to advance restoration goals and objectives? (For example, during formulation of the FY 94 Work Plan, broad-based support emerged for examination of the relationship of forage fish to various injured resources. There was also widespread recognition of the importance of continuing work on questions pertaining to what may be persistent genetic effects in pink salmon.)

Please list and describe your research priorities in terms of what questions or concerns should be addressed.

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**3. General Restoration Priorities for FY 95**

Are there any general restoration projects that you consider to be a priority for the FY 95 Work Plan? For each general restoration project, discuss why the project is needed in terms of the recovery status of the related injured resource(s).

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**4. Continuation Projects in FY95**

Please identify on-going projects that will need continued funding in FY 95. For those projects, identify what impacts would result if the project were not continued in FY 95.

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**5. Top Three Priority Projects or Concerns**

Of all the projects and concerns that you have identified for FY 95, please identify what you consider to be the top three priority projects or concerns:

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INJURED RESOURCE/SERVICE	Recovery Monitoring — Priorities for FY 95			Page 3
<u>Recovering Biological Resources</u>	Monitoring Needed in FY 95? (Y/N)	Priority of Monitoring in FY 95? (1 - 5)	Frequency of Monitoring Needed?	Why is it important to monitor? What kind of monitoring is needed? What important information or data would be lost as a result of not monitoring in FY 95?
a. Bald eagles				
b. Black Oystercatchers				
c. Sockeye salmon (Red Lake)				
d. Killer whales				
<u>Biological Resources Not Recovering</u>				
e. Pink salmon				
f. Sockeye salmon (Kenai River)				
g. Marbled murrelets				
h. Common murre				
i. Pigeon guillemots				
j. Harbor seals				
k. Sea otters				
l. Harlequin ducks				
m. Intertidal ecosystem				
n. Subtidal ecosystem				
o. Pacific herring				

INJURED RESOURCE/SERVICE	Recovery Monitoring — Priorities for FY 95			Page 4
<u>Biological Resources/Recovery Unknown</u>	Monitoring Needed in FY 95? (Y/N)	Priority of Monitoring in FY 95? (1 - 5)	Frequency of Monitoring Needed?	Why is it important to monitor? What kind of monitoring is needed? What important information or data would be lost as a result of not monitoring in FY 95?
p. Clams				
q. Cutthroat trout				
r. River otter				
s. Dolly varden				
t. Rockfish				
<u>Other Natural Resources</u>				
u. Archeological resources				
v. Designated wilderness				
<u>Injured Services</u>				
w. Commercial fishing				
x. Subsistence				
y. Recreation and tourism				
z. Passive use				

Please identify the person who completed this survey.	NAME: _____
	ORGANIZATION: _____
	ADDRESS: _____
	PHONE: _____

**Table B-1 List of Injured Resources and Lost or Reduced Services**

INJURED RESOURCES			LOST OR REDUCED SERVICES (Human Uses)
BIOLOGICAL RESOURCES		OTHER	
<b>Recovering</b> Bald eagle Black oystercatcher Intertidal organisms (some) Killer whale Sockeye salmon (Red Lake) Subtidal organisms (some)	<b>Not Recovering</b> Common murre Harbor seal Harlequin duck Intertidal organisms (some) Marbled murrelet Pacific herring Pigeon guillemot Pink salmon Sea otter Sockeye salmon (Kenai River) Subtidal organisms (some)	Archaeological resources Designated Wilderness Areas	Commercial fishing Passive uses Recreation and Tourism including sport fishing, sport hunting, and other recreation uses Subsistence
<b>Recovery Unknown</b> Clams Cutthroat trout Dolly Varden River otter Rockfish			

**List of Attendees**  
**Ecosystem-based Management Structure for Implementing the EVOS Restoration Plan**  
**January 13 & 14, 1994**

Jim Ayers - Executive Director, fax 907-586-7249/276-7178 Anch  
Molly McCammon - Director of Operations, fax 907-276-7178  
Eric Meyers - Project Manager, fax 907-276-7178  
Bob Spies - Applied Marine Sciences, fax 510-373-7834  
Pete Peterson - University of North Carolina, fax 919-726-2426  
George Rose - DFO Canada/Open, fax 709-772-4188  
Glenn Juday - University of Alaska, Fairbanks, fax 907-474-7439  
Byron Morris - National Marine Fisheries Service, fax 907-789-6608  
Alex Werthheimer - National Marine Fisheries Service, fax 907-789-6608  
Jeep Rice - National Marine Fisheries Service, fax 907-789-6608  
Dave Gibbons - U.S. Forest Service, fax 907-586-7555  
Sandy Rabinowitch - U.S. DOI, National Park Service, fax 907-257-2510  
Jerome Montague - Ak Department of Fish & Game, fax 907-465-4759  
Mark Brodersen - Ak Department of Environmental Conservation, fax 907-465-5375  
Tom Van Brocklin - PWS Communities Organized to Restore the Sound,  
fax 907-835-3864  
Torie Baker - PWS Ecosystem Assessment Planning Group, fax 907-424-3430  
Dan Hull - PWS Ecosystem Assessment Planning Group, fax 907-243-1679 call first  
John French - Fisheries Industrial Technology Center, Kodiak, fax 907-486-1540  
Gary Kompkoff, Tatitlek, fax 907-325-2298  
Gail Evanoff, Chenega, fax 907-573-5135  
Steve Planchon, The Nature Conservancy, fax 907-276-2584  
Pam Brodie, Sierra Club, fax 907-258-6807  
Leslie Holland-Bartel, U.S. DOI, National Biological Survey, fax 907-786-3636  
Kim Sundberg, Ak Department of Fish & Game, fax 907-349-1723  
Jess Grunblatt, Ak Department of Natural Resources, fax 907-276-7178  
Andy Gunther, Applied Marine Sciences, fax 510-373-7834  
Bob Loeffler, Ak Department of Environmental Conservation, fax 907-276-7178  
Art Weiner, Ak Department of Natural Resources, fax 907-278-7178  
L.J. Evans, Ak Department of Fish & Game, fax 907-258-9860  
Tony DeGange, U.S. Fish & Wildlife Service, fax 907-786-3350

**Invited but did not attend:**

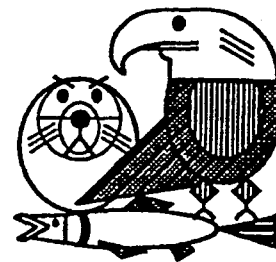
David Irons - U.S. Fish & Wildlife Service, fax 907-786-3641  
Bill Hines - National Marine Fisheries Service, fax 907-586-7249  
Veronica Gilbert - Ak Department of Natural Resources, fax 907-276-7178  
Brad Phillips, Public Advisory Group, fax 907-276-5315  
Ted Cooney, University of Alaska, Fairbanks, fax 907-474-7204

# Exxon Valdez Oil Spill Trustee Council

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone: (907) 278-8012 Fax: (907) 276-7178



## MEMORANDUM

**TO:** LaRae Jones  
Personnel

**FROM:** June Arkoulis-Sinclair  
Director of Administrative Services

**DATE:** March 2, 1994

**RE:** Trustee Council Positions

Provided below is a breakdown of Trustee Council positions being charged to the Department of Fish and Game and the collocation codes they should be charged to:

PCN	Employee	Sub-project/Collocation Code/LC
11-117002	Jim Ayers	Executive Director/11941100/11940024
11-117003	June Arkoulis-Sinclair	Executive Director/11941100/11940024
11-117007	Mary Rivera	Executive Director/11941100/11940024
11-117006	Mary McCammon	Operations/11941100/11940025
11-117009	Eric Meyers	Operations/11941100/11940025
11-117701	L. J. Evans	Operations/11941100/11940025
11-117702	Ward Lane	Operations/11941100/11940025
11-117704	Barbara Wilson	Operations/11941100/11940025
11-117706	Rebecca Williams	Operations/11941100/11940025
11-117008	Vacant	Operations/11941100/11940025
11-117705	Tammy Yockey	Operations/11940009
11-117707	Ron Bruyere	Operations/11941100/11940025
11-117703	Vacant	Operations/11941100/11940025

### Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

11-117005	Cherri Womac	Public Advisory Group/11941100/11940026
11-117708	Carrie Holba	OSPIC/11944230
11-117709	Beverly Hayes	OSPIC/11944230
11-117710	Jeffrey Lawrence	OSPIC/11944230

Please adjust all year to date charges to the appropriate collocation code. Thank you for your assistance.

cc: Molly McCammon, Director of Operations