Prince William Sound Restoration Plan
Draft Environmental Impact Statement

Annotated Outline

i. Executive Summary

The Executive Summary will provide the "highlights" of the full document, giving summary-level data for the projected impacts for each alternative. This section will contain many tables, graphs, and charts to facilitate comparison of the alternatives. The definition/purpose of a programmatic Environmental Impact Statement (EIS) will be given.

ii. Table of Contents

The ToC will list the major and minor sections of the document. A list of exhibits (figures and tables) will also be included.

I. Purpose and Need for Action

A. Introduction

The spill, applicable laws, the case and its settlement, roles of Trustee Council, Restoration Team, and Restoration Planning Work Group, NRDA process, and the NEPA process and its requirements will be described.

B. Purpose of Restoration Plan and EIS

The purpose of and legal requirements for both documents will be described. A brief description of the Restoration Plan will be included.

C. Restoration Definition and Need

The court orders and settlement agreements will provide the definition of and need for restoration. Definitions of resources and services will be presented.

D. Major Issues Identified by the Public

Issues identified during the scoping process and covered in the Draft EIS will be listed.

II. Alternatives Considered

Each alternative and its associated option categories, as presented in the Restoration Plan, will be described. Tables, charts, and graphs will be used to show the elements of each alternative and to highlight the differences among the alternatives. The projected indirect impacts of each of the alternatives will be addressed. Issues such as economic and development opportunity costs, possible employment benefits associated with biological research and monitoring, and infrastructure impacts will be addressed where possible. Option categories likely to require site-specific environmental analyses will be identified. The effects of the short-term uses of the environment related to the 10-year spending program on the maintenance and/or enhancement of the long-term productivity of the region will be discussed. Ecosystem productivity, employment levels, and economic impacts will be covered.

A. Preferred Action

No preferred alternative has yet been identified. It is assumed that the Trustee Council will identify the preferred alternative(s) before public release of the Draft EIS.

B. Alternative 0: No Action

The NEPA requirement for the null alternative will be explained. The "do-nothing" alternative will be described.

C. Alternative 1: Natural Recovery/No Change

Normal agency management, monitoring, and administration will be discussed as parts of this alternative. The alternative will be described per the Restoration Plan's definition.

D. Alternative 2: Habitat Protection/Acquisition

This alternative will purchase or otherwise protect land and marine habitats. The description will come from the Restoration Plan.

E. Alternative 3: Limited Restoration

The percentage of funds to be spent on each option category will be presented. General option categories included in the Restoration Plan's definition of the alternative will be discussed.

F. Alternative 4: Moderate Restoration

The percentage of funds to be spent on each option category will be presented. General option categories included in the Restoration Plan's definition of the alternative will be discussed.

G. Alternative 5: Comprehensive Restoration

The percentage of funds to be spent on each option category will be presented. General option categories included in the Restoration Plan's definition of the alternative will be discussed.

H. Other Alternatives Considered but Rejected

Alternatives considered and rejected will be briefly described and the reasons for their rejection given.

I. General Analysis of the Alternatives

Short summary/overview of differences among the alternatives.

1. Injured resources
   A table organized by injured resources and services will be used to show how each alternative is anticipated to affect each resource. Another table will list the possible methods of natural resource management and compare them with the five alternatives.

2. Sociocultural
   Potential effects of each alternative on the Prince William Sound sociocultural systems will be identified and discussed. Areas to be addressed may include changes in population and employment, effects on subsistence harvest patterns, economics, and land use. A profile of the social systems that characterize Prince William Sound will be provided. Discussions will address the social organizations and cultural values of populations in the region, as well as the ethnic, sociocultural, and socioeconomic makeup of the area.

3. Economic
   The comparison of the economic ramifications associated with implementing the options included in the proposed alternatives will be presented in tables similar to those presented for biological resources. The various sectors of the economy likely to be affected can be identified for each alternative.

III. Affected Environment

This chapter presents baseline information (from before the spill, up through the treatment period) against which impacts will be measured.

A. Physical Description

Baseline description of the physical environment within the study area, including geological features and activity, water quality, mineral and energy potential, climate, and habitat types will be presented.

B. Socioeconomic Description

Baseline description of the social, cultural, and economic conditions of the study area will be included. A brief historical background will be presented, as will descriptions of affected communities, subsistence, and injured cultural and anthropological resources. Topics to be included in the socioeconomic section include demographic data from 1990 Census data; local land use; and access to the communities. Economic resources/services that could be affected by implementation of the proposed alternatives will be represented by economic sectors or industries. These sectors will be described in the context of factors such as income and employment that could be affected by implementation of the options proposed as part of the alternatives. A brief description of the economic model, IMPLAN, will also be presented.

C. Biological Description

An overview of the common and injured biota in the study area will be presented. A summary of the Natural Resources Damage Assessment (NRDA) studies from 1989 to 1992 will also be presented.

IV. Environmental Consequences of the Restoration Plan

This chapter will set forth and will compare the projected effects of each of the proposed alternatives on the existing environment. Impacts will be quantified where possible; where quantification is not possible, qualitative data will be presented. Mitigation and offset measures will also be described.

A. Socioeconomic

The impacts of the alternatives on the social, cultural, and economic systems of affected communities will be identified and discussed.

1. Local economy and jobs
An assessment of the effect restoration plan options and alternatives have on the regional economy will include the effect on public and private sector employment and income. Where possible, option-related income generated within Alaska Native Corporations and other regional entities (i.e., boroughs) will be presented. Modeling to quantify the effects of various options will be used wherever possible and as appropriate. Economic modeling will be performed using the IMPLAN model. IMPLAN considers, where data permit, the effect that the purchase of goods/resources and services have on the sector (e.g., public, private, private-nonprofit) where this spending enters the local economy. The results of IMPLAN estimate the direct, indirect, and induced changes in regional income and employment likely to accompany these changes.

2. Native subsistence (Section 810 ANILCA)

Potential effects of alternatives on subsistence harvest patterns of the Prince William Sound area with regard to habitat alteration will be addressed. Issues will include—

a. Subsistence hunting and fishing

b. Use of subsistence resources

c. Access to subsistence resources

d. Changes in subsistence resources

e. Changes in subsistence resources distribution patterns

3. Transportation

Transportation impacts for all restoration plan alternatives will be measured in terms of the options being proposed for those alternatives. The demand for access to areas that could be affected will be of greatest concern. Specific options, if any, that are intended to facilitate transportation (e.g., refueling stations) will be addressed for the effect the option might have on the volume and methods of transportation involved. Future accessibility afforded by the option, and the transportation needs required to implement the option, will also be considered.

4. Recreation/tourism

Recreation and tourism is an important economic and social concern in the areas that may be affected by proposed restoration options. Real and perceived increases or decreases in recreational opportunities associated with the proposed alternatives will be measured in qualitative terms. A comparison will be made, where possible and appropriate, between what currently exists and the short- and long-term potential associated with option implementation. Tourism may require some shared impact assessment (i.e., common impacts) between the economic aspects of tourism and the physical increase or decrease in recreation opportunities.

5. Commercial fishing

Commercial fishing, like recreation and tourism, is a major part of the Alaskan economy and may be affected by various options under the proposed alternatives. The socioeconomic aspects of the commercial fishing industry can be measured in increases or decreases in employment and income in harvesting and seafood processing industries. Changes in the commercial fishing industry related to improvement or harm caused by the various relevant options (i.e., those affecting numbers of fish available for harvest, modification of regulations and fishing opportunities, etc.) will be evaluated for their impact on the commercial fishing industry and the individuals participating in the industry.

6. Commercial timber

The commercial timber industry will be affected by various restoration plan options such as the acquisition of habitat and timber rights, and natural/wilderness set-asides. These and other options have the potential to affect employment and income of the companies and individuals participating in the industry. The effect that a restoration plan alternative may have will depend on a variety of factors including the location, size, value, and quality of the forest resources involved. From a qualitative perspective, the impact assessment will identify the potential impacts alternatives could have on the number of jobs available and the income realized from the gain or loss of commercial timbering opportunities. Where possible and appropriate, quantitative impacts identified by the IMPLAN economic model will be presented.

7. Cultural and anthropological resources

The alternatives will be reviewed with regard to their impact on cultural and archaeological resources over the long and short term.

8. Local land use and growth

Most of the area affected by the alternatives is rural and remote. Information will be collected and evaluated regarding the potential short- and long-term impacts on local land use and growth relative to the alternatives.

9. Community facilities

Tbe majority of the affected communities exhibit little in the way of community facilities or infrastructure. The alternatives may require communities to invest in development of facilities and infrastructure. This potential and its impact on the communities will be discussed.

10. Consumers, civil rights, minorities, and women

The general impacts of the alternatives in specific segments of the study area will be addressed.

B. Natural Resources ~~(terrestrial and fishery biologists)~~

The environmental consequences associated with the implementation of the Restoration Plan will be assessed for several natural resource categories affected by the options contained in the Restoration Plan alternatives. The categories of natural resources include marine mammals, terrestrial mammals, birds (including waterfowl), fish (including shellfish), and coastal habitats. An alternatives's impacts will be evaluated for impacts (positive and adverse) on each of the resource categories. As appropriate, the effects of options on specific species or habitats within the resource category will be identified. The assessment of impacts will consider the effectiveness of the option (as identified by the Restoration Team alternatives development information) for benefiting or harming each resource or species within the resource category. A qualitative assessment methodology will be employed, consistent with the programmatic nature of the document. Tiering to available detailed resource evaluations and studies will be used as appropriate, to supplement the analysis performed for this section of the EIS.

C. Summary of Probable Unavoidable Adverse Impacts

A summary of the probable unavoidable negative impacts associated with each alternative will be presented.

D. Irreversible and Irretrievable Commitment of Resources

This section will describe the resources that will be permanently committed under each alternative. Actions such as increased mining or timber harvesting would fall into this category, as would threatened or endangered species whose populations are declining in PWS.

E. Cumulative Impacts

"Additive effects" will be addressed in this section. These are environmental, economic, socioeconomic, and physical effects from past, present and future changes in regional land/resource use. Changes related to implementation of the Restoration Plan and other reasonably

forseeable (i.e., planned) actions will be considered.

F. Unresolved Issues

This section will list all issues identified by the public but not addressed in the EIS.

V. List of Preparers

VI. Distribution and Review (NEPA process) of Draft EIS

A. Scoping Process

The scoping process (meetings, mailings, hearings, and open houses) will be described.

B. Trustee Council Role

VII. Public Comments and Coordination

This section will present a brief summary of how NEPA requirements for public involvement were satisfied—Notice of Intent, scoping, the appointment of the Public Advisory Group (PAG), and review of the Draft EIS and public comments. Copies of relevant advertisements and public announcements will be included, as well as the Notice of Intent.

VIII. References

IX. Index

X. Appendices

AA. Issues Identified by the Public

BB. List of Agencies and Persons to Whom Draft EIS Was Sent, and Letters Received from Agencies

CC. Comments and Public Responses to Draft EIS

Before establishing the format for this section, the team plans to wait and see how many responses are received and to solicit input from the PAG. The Final EIS will include public comments on the Draft EIS and the options. The EIS will answer only technical questions; political questions will be handled by the Trustee Council or the Restoration Team.

DD. Lists of Trustee Council, Restoration Team, and Public Advisory Group members

EE. Section 810 Evaluation on Subsistence

FF. Glossary of terms and acronyms

GG. Species List will include the common name, the Latin genus and species, and habitat for each species.

HH. Maps (any oversized maps will be folded into a pocket)

EIS Framework

Damaged Resources

Fish

- pink salmon
- sockeye salmon
- Dolly Varden
- pacific herring
- rockfish
- cutthroat trout
- other fish

Birds

- black oystercatchers
- common murres
- pigeon guillemots
- marbled murrelets
- harlequin ducks
- bald eagles
- black-legged kittiwakes
- glaucous-winged gulls
- storm petrels (?)

Mammals

- sea otters
- harbor seals
- killer whales
- humpback whales
- river otters

Intertidal Organisms

- shellfish (clams, mussels)

Subtidal Organisms

- eelgrass
- Fucus (popweed)
- other plant life

Non-Biological Resources

- archaeological sites
- beach zone

First-Level Impacts

Commercial fishing

Recreational fishing/hunting/gathering

Tourism (glacier-gawkers, sightseeing)

Subsistence
- Native
- non-Native

Recreational use (wilderness uses—hikers, kayakers; does not include fishing, hunting, or gathering)

Sociocultural impacts

Economic impacts

Intrinsic value (cv studies—what is it worth to people in the Lower 48 "just to know it exists"?)

Wilderness designation/Habitat value

Aesthetics

Food chain (consider bases only)

Second-Level Impacts

Health (public health, hospitals)

Safety (fire, police)

Social services

Economy (money, employment)

Transportation

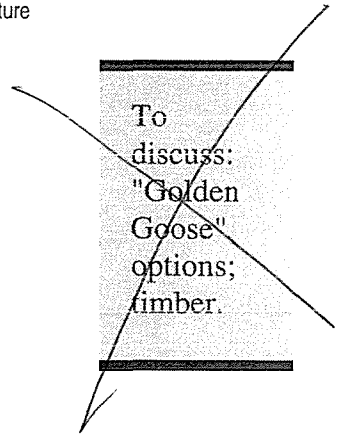
Quality of life

Water/sewage

Human population demographics

Biota population demographics (changes in genetic diversity, competition, etc.)

Native culture



EIS Framework, [redacted] First-Level Impacts by Resource

Injured resource	Comm. fishing	Rec. fishing, hunting	Tourism	Subsistence	Rec. use	Socio-cultural impacts	Economic impacts	Intrinsic value	Wilderness (Habitat)	Aesthetics	Food chain
Fish	✓	✓	✓	✓		✓	✓	✓ (?)			✓
Birds		✓	✓	✓		✓		✓	✓		
Mammals			✓	✓		✓		✓			
Intertidal organisms		✓		✓		✓					✓
Subtidal organisms									✓		
Non-biological			✓		✓	✓		✓		✓	

Notes:

- Fish may or may not have intrinsic value; the group was not certain.
- Clams (intertidal organisms) are not listed as economically important. Check with Matt Mc Millen.
- Recreational hunting of intertidal organisms means digging clams, etc.
- Birds are listed under tourism because bird-watchers visit rookeries.
- Mammals are listed under tourism because otters and orcas are popular attractions in PWS.
- Subsistence uses of birds include egg-gathering, use of feathers, etc., as well as hunting.
- Harbor seals are subsistence mammals.
- Clams, chitons, bidarkies, and other intertidal organisms are important subsistence foods.
- Sociocultural impacts resulted from damage to beaches and cultural artifacts.
- Intrinsic value is defined as the value of "just knowing something exists," and is the subject of contingent valuation studies and approximations.
- Subtidal organisms are listed under habitat because eelgrass and *Fucus* are important habitats for other biota.
- Items listed under "food chain" here are food-chain bases; other organisms were affected as a result of the bases' contamination.

Two items left to discuss:

- Where does timber fit into the model? It does not address a particular damaged resource, so it is not actually restoration.
- Where do "golden goose" options belong? "GG" options are those that do not directly address a damaged resource, that may have been developed before the spill, and that look upon the settlement money as a windfall.

III. Affected Environment
B. Baseline socioeconomic description

Region	Community	Government Type	Total Population	Non-Native Population (%)	Native Population (%)	Subsistence Prevalence	Industry and Employment	Median Income (1989)	Access
Kenai Peninsula Borough	English Bay	Unincorporated village	158	14	144	High			Air, water
	Homer	First-class city	3,660	3,530	130	Low	Fishery, tourism, recreation, agriculture		Air, water, roadway
	Kenai	First-class city	6,327	5,792	535		Fishery, fish processing, oil and gas development		Air, water
	Port Graham	Unincorporated village	166	16	150	High	Fishery, fish processing		Air, water
	Seldovia	First-class city	316	268	48	High	Fishery, fish processing, logging, tourism		Air, water
	Seward	Home-rule city	3,357	2,891	466	Low	Fishery, logging, coal, tourism, local government		Air, water, roadway
	Soldotna		3,482	3,324	158	Low	Sport fishery, tourism, recreation		Air, boat
Kodiak Island Borough	Akhiok	Second-class city	77	5	72	High	Fishery, local government		Air (infrequent)
	Karluk	Unincorporated village	71	6	65	High	Subsistence, fishery		Air, water
	Kodiak	Home-rule city	6,365	5,554	811	Low	Fishery, fish processing, tourism, logging/timber, government		Air, water
	Larsen Bay	Second-class city	147	23	124	Low	Fishery, fish processing, tourism		Air, water

	Old Harbor	Second-class city	284	32	252	Moderate	Fishery		Air, water
	Ouzinkie	Second-class city	209	31	178	High	Fishery		Air, water
	Port Lions	Second-class city	222	72	150	High	Fishery		Air, water
Lake and Peninsula Borough	Chignik Bay	Second-class city	188	103	85	Moderate	Fishery		Air, water
	Chignik Lagoon	Unincorporated village	53	23	30	High	Fishery		Air, water
	Chignik Lake	Unincorporated village	133	11	122	High	Fishery		Air, water
Valdez-Cordova Census Area	Chenega Bay		94	29	65	High	Fishery	$22,083	Air, water
	Cordova	Second-class city	2,110	1,873	237	Low	Fishery, aquaculture, fish processing	$46,304	Air, boat, roadway
	Tatitlek	Unincorporated village	119	16	103	High	Fishery	$27,188	Air, water
	Valdez		4,068	3,829	239	Low	Oil, fishery, government, transportation	$68,570	Air, water, roadway
	Whittier		243	213	30	Low	Fishery, tourism, transportation	$33,636	Air, water, roadway

3/11/93

Schedule

Chapters 1, 2 & 3	end of March
Chapter 4 dropt	5/5/93
Comments returned	5/14/93
final draft EIS	5/31/93

DRAFT

				1	2	3
4	5	6 Jewish Passover	7	8	9 Good Friday	10
11 Easter Sunday	12 FAIRBANKS?	13 FAIRBANKS?	14 JUNEAU	15 ANCHORAGE	16 orthodox Good Friday PAG?	17
18 orthodox Easter	19 KODIAK	20 PORT GRAHAM — CHIGNIK LAKE	21 SELDOVIA — AKHIOK	22 HOMER — LARSEN BAY?	23	24
25	26 CORDOVA	27 VALDEZ	28 TATITLEK	29 CHENEGA BAY (?)	30	

MARCH
S M T W T F S

MAY
S M T W T F S

VETERINARIAN