ID # 9205140007

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Deer/Elk Transplant

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- Affiliation
- Costs

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: TM

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

92c... [illegible]

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

? Permits fed ✓

Comments:

* Restoration Framework, 1992, pp 43-44.

Document ID Number
05 14007

- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

EXXON VA Z OIL SPILL TRUSTEE COUN(

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Transplant Project

Justification: (Link to Injured Resource or Service)

Replace or enhance a damaged resource

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Transplant Blacktail deer and Roosevelt elk to Southern Kenai Peninsula and/or Alaska Peninsula. Transplant Goat (Rocky Mtn.) to Montague Island.

Estimated Duration of Project: 2 year minimum

Estimated Cost per Year: not provided

Other Comments:

Name, Address, Telephone:

DR. WM WEST
WEST CHIRO CLINIC
138 W. MARYDALE DR.
SOLDOTNA, AK 99669
phone # not supplied

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

1993 JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

920615291-02

RESTORATION PROJECT

TITLE OF PROJECT:

Restoration Of Windy Bay Mussel Beds.

JUSTIFICATION:

NRDA studies established that mussel beds in areas of heavy pollution, including the Windy Bay Area of the Lower Kenai Peninsula continue to be heavily polluted on account of mussel population entrapping oil, which remains fresh and unweathered, resulting in continued contamination of the food supply and food chain. The Subsistence Food Health Task Force has identified Windy Bay mollusks as highly toxic.

DESCRIPTION OF PROJECT:

A. Goals: To clean out contaminated mussel beds and the underlying oil, and thereafter to respat the clean beds with uncontaminated blue mussels.

B. Objective: To remove a source of continuing pollution threatens, if not restored, the food chain in Windy Bay area, to remove the threat of unweathered oil, and to determine the number of barrels of unweathered oil buried beneath the mussel beds.

C. Location: Windy Bay, Lower Kenai Peninsula.

D. Rationale: The NRDA Studies have established the continuing treat to the restoration of the Sound on account of contamination entrapped by the mussel beds.

E. Technical Approach: To be determined.

ESTIMATED DURATION OF PROJECT: 1-2 years.

ESTIMATED COST PER YEAR: $500,000.

OTHER COMMENTS:

The State of Alaska determined some time ago the continuing threat of oiled mussel beds. See memoranda.

NAME, ADDRESS, TELEPHONE:

PORT GRAHAM CORPORATION
Patrick Norman, President
P.O. Box P.G.M.
Port Graham, Alaska 99603
(907) 284-2212

JUN 15 REC'D

PORT GRAHAM CORPORATION
P. O. BOX PGM • PORT GRAHAM • ALASKA 99603-8998 • (907) 284-2212 • FAX 284-2219

Document ID Number
920615291
☐ A-92 WPWG
☒ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

FACSIMILE TRANSMISSION

DATE: 6-15-92 TIME: 4:45

DELIVER TO: Dave Gibbons

COMPANY NAME: Restoration team

Fax Number: (907) 276-7178

Total transmitted: _____
(including this page)

RE: restoration proposals from Port Graham

FROM: Pat Norman
PORT GRAHAM CORPORATION

MESSAGE: Originals in the mail

Shellfi

9206152941 01

A-S2 WPWG
B-93 WPWG
C-RPWG
D-PAG
E-MISC.

RESTORATION PROJECT

TITLE OF PROJECT:

Restoration Of Mussel Beds.

JUSTIFICATION:

NRDA studies established that mussel beds in areas of heavy pollution, including the land owned by Chenega Corporation continue to be heavily polluted on account of mussel population entrapping oil, which remains fresh and unweathered, resulting in continued contamination of the food supply and food chain. See also DEC Internal Memorandum.

DESCRIPTION OF PROJECT:

A. Goals: To clean out contaminated mussel beds and the underlying oil, and thereafter to respat the clean beds with uncontaminated blue mussels.

B. Objective: To remove a source of continuing pollution threatens, if not restored, the food chain in Prince William Sound, to remove the threat of unweathered oil, and to determine the number of barrels of unweathered oil buried beneath the mussel beds.

C. Location: Southwestern Prince William Sound, including Chenega Island, Knight Island, Evans Island, Bainbridge Island, and the area surrounding Bainbridge Passage.

D. Rationale: The NRDA Studies have established the continuing treat to the restoration of the Sound on account of contamination entrapped by the mussel beds.

E. Technical Approach: To be determined.

ESTIMATED DURATION OF PROJECT: 1-2 years.

ESTIMATED COST PER YEAR: $500,000.

OTHER COMMENTS:

The State of Alaska determined some time ago the continuing threat of oiled mussel beds. See memoranda.

NAME, ADDRESS, TELEPHONE:

CHENEGA CORPORATION
Charles W. Totemoff, President
P.O. Box 60
Chenega Bay, Alaska 99574
(907) 573-5118

Manip + Enhance.
Fish + Shellfish

EXXON VALDEZ L SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number
920618316-01

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

...le of Project:
Mussel Bed Treatment

Justification: (Link to Injured Resource or Service)
Food chain problem with Harlequin Ducks, et al.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

It may be possible to spray a water insoluble hardener into the bissel thread matrix where the oil is trapped. This hardening agent would trap and isolate the oil as long as four months, or during the summer season. When the non-toxic hardening agent becomes brittle, cracks and breaks up, it will probably take the oil with it when it is washed from the mussel beds, the hardener will prevent the sea birds and ducks from ingesting the oil-contaminated detrities. It will also provide a good solid matrix for collection of a new detritis beds, which will eventually serve as food for the birds.

There are commercial materials available that can be used which will harden even under water, but the material will most likely be applied to the mussel beds during low tides. The material would be hand-sprayed from a back-pack dispenser. There is a possibility one treatment would be sufficient.

Estimated Duration of Project: Two summers - 1993-1994

Estimated Cost per Year: $500,000.00 per year

Other Comments: This is highly experimental and should be tried in the field in 1992 before broad application is permitted.

Name, Address, Telephone:
Martech USA, Inc.
300 E. 54th Av.
Anchorage, AK 99518

Attn: Gary Lawley

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

EXXON VALDE IL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number
920018316-02

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

tle of Project:
Mussel Bed Treatment

Justification: (Link to Injured Resource or Service)
Food chain problems with Harlequin Ducks, et al.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The first priority would be to find suitable treatment habitat, i.e., rock surfaces with mussel beds that are presently in use by Harlequin Ducks. These materials could be peeled back by hand using specially designed shears. An enzyme can then be sprayed on both the rock surface and the underside of the mussel mat to identify the oil. It could then be sprayed with high volume, low velocity water to wash off the liquified oil. The oil would still float and could be collected by snare boom or skimmed from the water surface by mechanical methods. The cleaned mussel bed mat could be laid back on the rock surface it came from (one end is always left attached) and rock stapled in place. It should restabilize immediately and provide clean feeding grounds immediately.

This project would be labor-intensive and only a few large bays or selected areas treated in 1993. The project, if successful in 1993, could be greatly expanded in 1994.

Estimated Duration of Project: Summer - 1993 - 1994

Estimated Cost per Year: $250,000.00 for the first year.

Other Comments: This would be expensive per unit area but would have a high probability for success.

Name, Address, Telephone:
Martech USA, Inc.
300 E. 54th Av.
Anchorage, AK 99518
Attn: Gary Lawley

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # C 5601059

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Manipulation

✓ Lead Agency

ADEC

_____ Cooperating Agency(ies)

_____

Y N Passed initial screening criteria

unknown

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
		✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
		✓	2. Technical feasibility.*
		✓	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Natural Product Natural Life Restoration Proposal A-D

Justification: (Link to Injured Resource or Service)

Clean up oiled beaches

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

"The opportunity to help a natural army of workers to restore the Shorelines of Alaska is at our disposal."

Estimated Duration of Project: 1 year

Estimated Cost per Year: 1,071,850.00

Other Comments:

Name, Address, Telephone:

Jerry Dale Rusher
Rusher Services
HC 33 Box 2866
Wasilla, Ak. 99687
907 376 9275

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 920514006

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Shellfish

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category

Manipulation + Enhancement

✓ Lead Agency

ADF+G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

9205140006

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

EXXON VA[illegible]Z OIL SPILL TRUSTEE COUN[illegible]

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Clam Enhancement

Justification: (Link to Injured Resource or Service)
Local subsistance, development of mariculture technology

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Goals: Enhance native littleneck and butter clam populations.

Objectives: Develop enhancement techniques for native clam populations including juvenille production and growout techniques.

Location: Institute of Marine Science, Seward Alaska
Fairmont Island, Naked Island, Tatitlek, Chenega Bay, La Touche

Rationale: clam populations used for subsistance in Prince William Sound have been on the decline for many years. The Exxon Valdez spill decimated the remaining population and local use is down dramatically. Enhancement techniques such as the seeding of beaches and predator control have proven successful in other regions. Techniques developed in this project could be applied to developing shellfish industry in Alaska.

Technical Approach: Native shellfish population will be spawned and raised in a nursery prior to seeding beaches. Predator control will be excercised on enhanced populations and on beaches were natural production is significant. Local population will be surveyed as a baseline to evaluate enhancement success.

Estimated Duration of Project: 5 years

Estimated Cost per Year: $120,000

Other Comments:

Name, Address, Telephone:

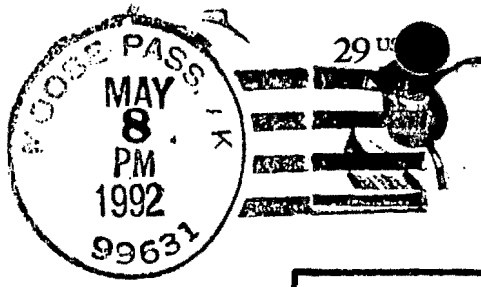
Jeff Hetrick
Alaska AquaFarm
P.O. Box 7
Moose Pass, AK 99631

Box 7.
Moose Pass, AK
99631

MAY 11 REC'D

Attn: 1993 Work Plan

Exxon Valdez Trustee Council
645 G Street
Anchorage, Ak
99501



Document ID Num
9205140
A-92 WPW
B-93 WPW
C-RPWG
D-
E-MISC.

ID # 0615297-06

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Shellfish

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Manip - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓝ N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920613297-06

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VAL 'Z OIL SPILL TRUSTEE COUN

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Replacement of Oiled Mussels with Commercially Produced Mussels

Justification: (Link to Injured Resource or Service) Some mussel beds were not cleaned following the Exxon Valdez Oil Spill because the cleaning process killed mussels whereas oiling did not. It was thought that beds would naturally clean after exposure to waves and storms. Oil was trapped between he mussels and their substrate. it remained unweathered and birds and mammals which ate mussels would consume oil along the mussels. Reproductive failure of harlequin ducks may be related to oil exposure in this manner.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) Remove oiled mussels, clean substrate, replace with hemp strands of mussel spat or larger mussels if necessary. Mussels of the size sold for human consumption are sold for $1.70/lb. In extreme cases, this may be necessary; however, contracts can be given to current mussel aquaculturists to simply collect spat in the spring of 1993 by putting the appropriate numbers and lengths of spat collectors (hemp rope) in areas where mussel larvae are present. These ropes can then be anchored over the cleaned beds. The rope will biodegrade, but not before these mussels can attach other byssal threads to the natural substrate and become permanently anchored. Cost are dependent upon the needs identified by R102, the Oiled Mussel Bed project.

Estimated Duration of Project: 1-2 years

Estimated Cost per Year: $100, 000 to $500,000 dependent upon the magnitude of mussel bed replacement needs.

Other Comments:

Document ID Number
920615297 06

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RFWG
- ☐ D-PAG
- ☐ E-MISC.

Name, Address, Telephone:
Jim Cochran, Mariculture Coordinator
Alaska Dept. of Fish and Game
P.O. Box 25526
Juneau, AK 99802-5526
907-465-4160

ID # 15297 -01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Shellfish

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓝ N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

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1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

206 #15297-07

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Maricultural Technical Center

Justification: (Link to Injured Resource or Service) Clams, crab, shrimp and other shellfish supported subsistence and commercial fisheries prior to the Exxon Valdez Oil Spill and are major links in the food chain of Prince William Sound. Bivalves especially were destroyed by cleaning practices and others died due to toxic effects of the oil. Subsistence users were denied the benefit not only of those which died but also those which were or were suspected of being contaminated with petroleum hydrocarbons. Bivalves are important in the diets of otters, harlequin ducks, oystercatchers and other birds and mammals. Commercial fisheries for shrimp and crabs are important, but because they are also utilized by many of the injured fish, birds and mammals, recovery of the EVOS-affected ecosystem depends upon their recovery as well.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) The project will construct a mariculture research and hatchery facility within the spill affected area. The facility size would be approximately 3800 sq. ft. with dual saltwater intakes and modular construction allowing multiple species research. A staff four (3 full-time, 1 seasonal) would provide basic center operations. The facility would be utilized for restoration and enhancement programs in the affected areas. Functions include: clam and mussel culture to re-seed impacted populations (including removal of oiled mussels and replacement with cultured ones, and replacing tainted subsistence use stocks), shrimp and crab culture research, providing oyster, clam scallops and other indigenous species seed to subsistence communities.

Estimated Duration of Project: ___Two years with Oil settlement monies.

Estimated Cost per Year: OY 93 $2.2 million, OY 94 $280.0 Thousand

Other Comments:

Name, Address, Telephone:
Jim Cochran, Mariculture Coordinator
Alaska Dept. of Fish and Game
P.O. Box 25526
Juneau, AK 99802 907-465-4160

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ID #

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manip. or Enhancement

✓ Lead Agency DNR

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: Recreation

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

PROPOSAL FOR OIL SPILL RESTORATION PROJECT

Title of Project: Public Use Cabins in State Marine Parks

Justification: Public use cabins are among the most popular outdoor recreation programs in the spill affected area. Several state marine parks in Prince William Sound Resurrection Bay, the outer coast of the Kenai Peninsula, and the Kodiak area are potential sites for cabins, which would compensate for lost resources and services in the spill affected area, as well as respond to altered use patterns stemming from spill damages and cleanup activities themselves.

Because of the long time frame for complete restoration, much of the affected area has been rendered less desirable for recreation facilities like cabins. New recreation facilities should instead be considered at marginally affected or unaffected sites. Facilities at lightly oiled or unaffected sites should be considered restoration, since they compensate for postponed or canceled facilities in heavily affected areas that would have been built if the spill had not occurred.

Description of Project: Alaska State Parks/DNR proposes to plan, design, build, and operate ten public use cabins at selected state marine parks. Specific locations have not been determined, pending completion of a management and development plan currently underway for the marine parks in Prince William Sound and Resurrection Bay. That plan, including a public review process, is scheduled for completion in late 1993.

Proposed funding would support site selection and preparation work, plus all labor, materials and services related to cabin construction (including transportation). Necessary maintenance and operating funds for the first five years of operation are also included in this proposal.

Complete unit cost of a single cabin, built and furnished for occupancy, is estimated to be $30,000, for a total cost for ten cabins of $300,000. Annual operating and maintenance costs are estimated at $50,000. The five year total for operations and maintenance equals $250,000. User fees from cabin rentals would be available for cabin maintenance, although rental fees would never fully recover operating costs. There is also the possibility of attracting federal matching funds, for example Dingell-Johnson funds, to build trails and provide other facilities in association with these cabins.

These new cabins would be added to the 21 cabins already part of the state's public use cabin system. They would be available through a reservation system, and subject to a modest fee (current average $25/night). The state is working with the Forest Service on cooperative agreements and other means of acheiving cabin operating efficiencies, including a consolidated cabin reservation system.

Estimated Duration of Project: Six years. Site selection and construction in 1993 and operations/maintenance 1994-1998.

Estimated Cost Per Year: In 1993, $150,000, which will build 5 cabins. In 1994, $150,000 (5 cabins). 1994-1998, $40,000 annually for maintenance and operations.

Other Comments: A recent survey of 600 Alaska households regarding recreational attitudes indicates that expansion of the public use cabin system is the 3rd highest priority for state action. Cabins received a higher priority than trails, campgrounds, and picnic areas.

Name, Address, Telephone: Neil Johannsen or
David Stephens
Alaska State Parks
Box 107001
Anchorage, AK 99510
907-762-2602

ID # 920615 CIB -55

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

_____ Category Manip Enhance

_____ Lead Agency ~~USFS~~ USDA

_____ Cooperating Agency(ies) ADNR

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

a20615298-55

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

roject Title: Low Impact Recreation Development in the Nellie Juan College Fjord Wilderness Study Area

2985
55

ustification: (1) As a result of the oil spill, recreation users were isplaced to other locations, increasing use in existing sites, and reatingresource damage. (2) Provide low impact recreation facilities/site to ed ibute use away from heavily used sites and back into areas affected by the il ll and accommodate increased recreation use as a result of the publicity rince William Sound received.

roject Description: This project will involve the development of four types of ecreation facilities to handle the increased use in the Sound.

(1) Recreation Cabins - Recreation cabins of typical forest service style ill be constructed at the following locations:

*Three Finger Bay (off Cochrane Bay)

*Port Audry (head of Drier Bay)

*Herring Bay (Knight Island)

*Head of Eaglek Bay

*Miners Bay/Lake (Unakwik Inlet)

*Snug Harbor (Knight Island)

*Cabin Bay (Naked Island)

*Cedar Bay

(2) Mooring Buoys - Mooring buoys will be placed at the following ocations:

*Disk Island

*Solf Bay (off Herring Bay)

*Miners Bay

*Granite Bay (off Wells Bay)

(3) Tent Platforms and Outhouse Facilities

*Willard Island

*Barry Arm

*Applegate Beach

Woods
Ave Woodward

298505

(4) Hiking Trails - Hiking trails built to wilderness standards (maximum 2' ide, minimum cut/fill, boardwalk across muskeg, timber bridges, etc.) will be onstructed as follow:

*From Threefinger Bay to Shrodelake Cabin (1 1/2 miles)

*From Mines Bay to east end of Mines Lake (4 miles)

*Paulson Cabin to Paulson Creek (3/4 mile)

*Port Audry/Drier Bay to S. Thumb/Bay of Isles (3 miles)
(coop with CAC)

*Siwash Bay to head of Eaglek Bay (3 miles)
(coop with State of Alaska)

Pigot Bay (3 miles)

roject Duration: Estimate project to last 5 to 8 years.

stimated Cost Per Year: Year 1: $100,000 for environmental analysis; following ear finding is based on projects for each year. Following is the estimated cost or each project:

Cabins (each)	$ 35,000
Mooring Buoys (each)	15,000
Tent Platforms and outhouse Facilities (each)	12,000
Trails:	
Three Fingers	90,000
Miners Bay	400,000
Paulson Creek	20,000
Port Audry	100,000
Siwash Bay	75,000
Pigot Bay	150,000

Bruce VAN Zee
201 East 9th
Anchorage Alaska 99501

Steve Hennig
783-3842

Valley

ID # 920601050-14

Increase access to PWS $25 million $1 million/yr.

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Recreation

✓ Checked for Completeness

- ID stamped/Input completed
- Name
- Affiliation
- Costs

✓ Category

Restoration - Manipulation for Enhancement

Lead Agency

USFS USDA

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920601050-14

1993 PROJECT SCORING SHEET

Critical Factors

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YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
		✓	2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

March 9, 1992

Mr. Dave Gibbons
Interim Executive Director
Exxon Valdez Oil Spill Restoration Team
645 "G" Street
Anchorage, Alaska 99501

FAX: 276-7178
Original Mailed

RE: VALDEZ PROJECT COSTS

Dear Mr. Gibbons:

I believe a January 27, 1992 letter from me to Mr. William Walker has been provided to you listing examples of projects I believe might qualify and be useful as part of the Prince William Sound restoration effort. I know that exact criteria to determine project eligibility is still in its formative stages and the City of Valdez intends to fully engage in this process.

In the meantime, the City of Valdez Engineer has provided a supplement to my earlier letter by preparing estimates of costs for the eleven projects listed in my January 27 letter. The estimates are general and "ball park" in nature and are primarily designed to give you a sense of magnitude for funding. As these projects are deemed eligible for funding under the Exxon restoration criteria, more detailed and exacting estimates can be performed.

If you have any questions about this, please contact me.

Sincerely,

Doug Griffin
City Manager

DG:blp

Enclosure

cc: Mayor John Harris
City Councilmembers
William Walker, Valdez City Attorney
William Wilcox, Valdez City Engineer

P.O. BOX 307 • VALDEZ, ALASKA 99686
TELEPHONE (907) 835-4313 • TELEX 25-381 • TELECOPIER (907) 835-2992

ID # 20615298-16

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Recreation

_____ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

_____ Category ~~Mgmt Actions~~ Manipul Enhancmt

_____ Lead Agency USFS

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9206152 98-16

1995 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

2 9816

Title of Project: Enhanced Trail Opportunities, including Columbia Glacier and Blackstone Glacier National Scenic Trails

Justification:

Recreation use in Prince William Sound decreased or was displaced following the spill. Enhanced recreation opportunities provided by an expanded trail system will increase use, as well as increase accessibility to a portion of the Sound for the less skilled user.

Description of Project:

GOAL: To develop a system of trails serving a range of user skill levels and activities in and around the Sound. The proposal includes a minimum of four components: (1) trails providing access to PWS from the Seward Highway Scenic Byway; (2) a National Scenic Trail along portions of the shoreline of the Sound; (3) connecting trails between salt water recreation facilities, such as mooring bouys and landing sites, and inland recreation attractions; and (4) designated saltwater routes, or "kayak trails".

Potential routes in the system include: Anchorage to the Sound with feeder trails from Girdwood, Portage, and Bird Creek; a shoreline National Scenic Trail through Whittier connecting Point Doran and Blackstone Glacier; a shoreline trail from Valdez to Columbia Glacier; and a network of trails on Montague Island. The total system would be 150-200 miles, and would be designed and managed to accommodate a variety of users including hikers, mountain bikers, and kayakers. Support facilities such as cabins, mooring bouys, and signage would also be provided at appropriate locations.

Estimated Duration of Project: 10-12 year feasibility and construction phase, followed by ongoing operation and maintenance.

Estimated Cost per Year: The project would be funded over a 10-12 year period as follows: FY 93 - $150,000, FY 94 - $200,000, FY 95-05 - $1,000,000 per year.

Other Comments: Implementation of this proposal would require partnerships with other agencies, regional and village corporations, interest and user groups, and private citizens.

Name, Address, Telephone:
Bruce Van Zee, Forest Supervisor
Chugach National Forest
201 E. 9th Ave
Anchorage, Alaska 99501
907-271-2500

Technical contacts:

Susan Rutherford, Staff Officer
Dave Hackett, Recreation Specialist

ID # 20615298-15

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category ~~Agent Actions~~ Manip Enhancement

Lead Agency USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-15

1995 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29815

Title of Project: Prince William Sound Recreation Facili...

Justification:

Recreation visits to Prince William Sound (PWS) decreased or were displaced as a result of the Oil Spill. Identifying and providing a range of recreation facilities in the Sound will restore lost use and accomodate displaced users. This will enhance the recreation experience of current and future visitors to PWS.

Description of Project:

GOALS: (1) To enhance recreation opportunities in PWS by providing additional recreation facilities, and (2) to maintain the existing character of PWS and the quality of the recreation experience. Facilities would include mooring bouys, public recreation cabins, hardened tent sites, trails, interpretive and informative signs.

PROJECT: To ensure that the quality of the current setting and opportunities is not degraded, the "Limits of Acceptable Change" (LAC) system will be used to determine the best locations and numbers of each type of facility. LAC requires managers, in consultation with the public, to define desired conditions in the recreation setting, and to undertake actions to maintain or achieve these conditions. Results of past planning efforts will also be incorporated, including AK DNR's Prince William Sound Area Plan, Recreation & Tourism Element (June 1987); Potential Units of the AK Marine Parks System (March 1983), and past Forest Service inventories of recreation use areas and potential facilities. Cabins and signs may be located inland along trails that connect Anchorage and the Kenai Penninsula to PWS. Locations will avoid areas that remain impacted by oil, critical waterfowl and wildlife habitats, and other sites which may be affected by increased human use. Interpretation will be used to encourage minimum impact behavior by visitors.

Estimated Duration of Project: 5 years

Estimated Cost per Year: $250,000

Other Comments: outyear costs will be revised as actual facility needs, sites, sizes and types are decided.

Name, Address Telephone:
Bruce Van Zee
Forest Supervisor
201 East 9th, Suite 206
Anchorage, AK 99501

Technical Contact:
Susan Rutherford, Staff Officer
Alison Rein, Landscape Architect

ID # 20615298 -14

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category ~~Mgmt Action~~ Manip Enhancement

Lead Agency USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

-20615298-14

199_ PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29814

Title of Project: Prin(illiam's Campground

Justification:

Recreation use of the Sound decreased or was displaced immediately after the spill. Use in some areas in the southern part of the Sound are still impacted to some degree. As a partial result of the publicity generated by the oil spill, a new demand for recreation different than either scenery viewing from cruise ships or primitive camping appears to be developing among some segments of the public.

Description of Project:

GOALS: (1) Provide a facility for visitors desiring a more social-based camping experience than available at isolated, small cabins; and (2) provide a facility that enables visitors to experience the landscape and resources of PWS they have seen portrayed in oil spill coverage.

PROJECT: The proposal is to develop a campground of 30-60 units, depending on the demand analysis, equipped with cabins rather than traditional tent pads and RV sites. Such a facility would be designed to provide a rustic "base camp" for day trips, as well as meet the demand for cabins by groups larger than can be accomodated at existing, isolated cabins. The campground would be located along the Alaska Marine Ferry Route and would be serviced by a shuttle boat connecting the facility with the Ferry. It would also be located to connect with existing and proposed trail systems on land and water. Proximity to fishing, glacier viewing, and wildlife viewing opportunities is essential. Interpretation of the tidewater ecosystems and the cultural history of the Sound, including the oil spill, would be incorporated into the facility design and operation.

Estimated Duration of Project: **Five to seven years for feasibility analysis through construction phases, followed by permanent operation of the facility.**

Estimated Cost per Year: **Five year funding schedule is FY 93 - $70,000; FY 94 - $100,000; FY 95 - $500,000; FY 96 - $500,000; FY 97 - $500,000.**

Other Comments: **Prince William of Great Britain will be invited to dedicate the facility. Involvement by the British royal family would provide positive media coverage for Prince William Sound and the recovery efforts, as well as highlight exploration of southcentral Alaska by English explorers. We will propose developing the facility in partnership with Operation Raleigh, a conservation and development program sponsored by Prince Charles for young adults of the British Commonwealth. Operation Raleigh has mounted expeditions to the Chugach National Forest in the past.**

Name, Address, Telephone:

Bruce Van Zee, Forest Supervisor
Chugach National Forest
201 E. 9th Ave
Anchorage, Alaska 99501
(907)271-2500

Technical Contact:

Susan Rutherford, Staff Officer
Dave Hackett, Recreation Spec

ID #_ 20615298-08

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category
~~Mgmt Action~~ Manip Enhance

Lead Agency
USFS

Cooperating Agency(ies)
ADNR

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-08

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
—	—	—	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓	—	—	2. Technical feasibility.*
✓	—	—	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EX... VALDEZ OIL SPILL TRUSTEE COUN(

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

PRINCE WILLIAM SOUND KAYAK TRAIL

Justification: (Link to Injured Resource or Service)

Recreational visits to Prince William Sound decreased and the quality of the experience was degraded because of the Exxon Valdez oil spill. We are proposing the creation of a kayak trail system to enhance the recreational experience in Prince William Sound.

Description of Project:

Goal: 1) To enhance the kayaking publics recreational experience in Prince William Sound. 2) To direct the kayaking public to identified camping locations. 3) To provide a variety of interpretive sites on a variety of resources.

Project: We are proposing the development of a system of kayak or other watercraft trails in Prince William Sound. Chugach National Forest will work cooperatively with the state on developing the water routes and will develop primitive campsites and interpretive sites along the selected routes. This project will involve a two-year planning phase and then a five year implementation phase.

Estimated Duration of Project: 7 years

Estimated Cost per Year: $100,000

Other Comments

Name, Address Telephone:
Bruce Van Zee
Forest Supervisor
201 East 9th
Anchorage, AK 99501

Technical Contact
Anne Jeffery, Public Affairs Officer
271-2508

Oil Spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

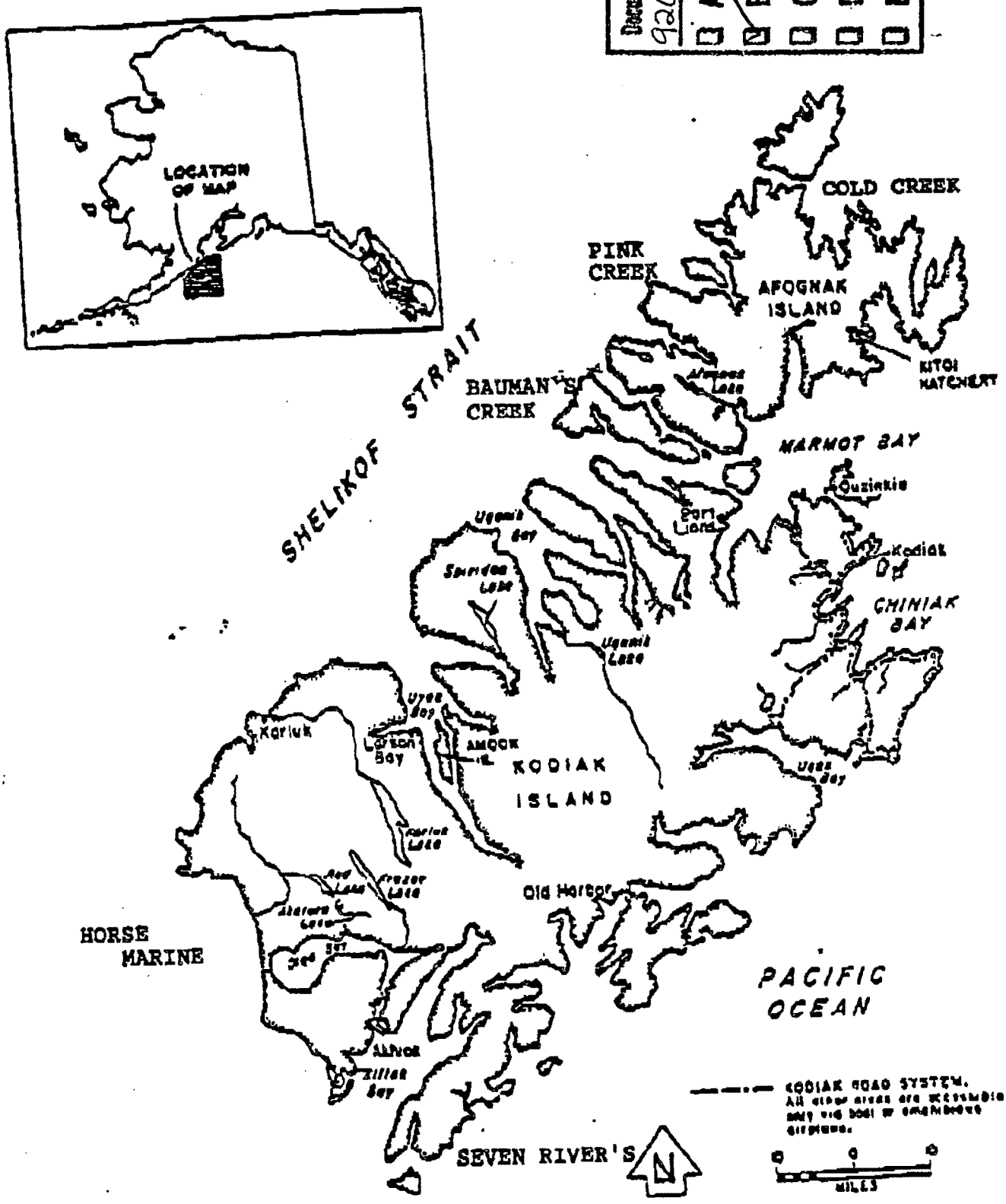

Figure 1. Area map of Kodiak and Afognak Islands

ID # 93-615297-271

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ø N Passed initial screening criteria

_____

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29771

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: FRY REARING TO IMPROVE SURVIVAL AND RESTORE WILD PINK AND CHUM SALMON STOCKS

Justification: The Exxon Valdez oil spill severely damaged wild pink and chum salmon stocks in Prince William Sound (PWS). Salmon eggs deposited in 1989 and all subsequent years have been contaminated and direct egg mortality has been documented. Higher incidence of somatic, cellular and genetic abnormalities were found among alevins and fry from oiled creeks. Genetic damages among salmon from oiled streams may have caused functional sterility increasing egg mortality in recent years. This project will offset the high mortalities documented in recent years.

Description of Project: This project will accelerate the recovery of damaged wildstock pink and chum salmon by increasing early marine survival and reducing commercial exploitation when adults return. The natural mortality of salmon fry is typically very high during the early marine period immediately after the fish enter saltwater. Ongoing studies in PWS indicate that fry-to-adult survival can be doubled if fry are reared in net pens and released during optimal growth conditions in the ocean. This project will apply this technology to restore damaged wildstock pink and chum salmon. Stray wildstock fish from enhanced stocks will help re-populate adjacent damaged stocks. Commercial exploitation of returning adults will be reduced by coded-wire tagging. Fry weirs will be installed at six of the largest oiled pink and chum salmon producing streams in PWS. Fry will be captured, held in netpens, and fed a commercial diet for several weeks. Fry will be released when growth conditions in the ocean are optimal for fry survival. A representative sample of fry will be coded-wire tagged at each site. Recoveries of coded-wire tagged adults in the commercial fishery will provide fishery managers with the information they need to direct exploitation away from damaged wildstock salmon.

Estimated Duration of Project: Until recovery of wildstocks
Estimated Cost per Year: $727,000

Other Comments: Studies conducted as part of the 'Instream Habitat and Stock Restoration' project (R105) have identified appropriate sites for fry rearing in PWS.

Name, Address, Telephone: Mark Willette
Alaska Dept. of Fish and Game
P.O. Box 669
Cordova, Alaska 99574
(907) 424-3214

ID # 6 0615297-75

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

/ Checked for Completeness

- /ID stamped/Input completed
- /Name
- /Affiliation
- /Costs

/ Category

Restoration enhancement

/ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ø N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920615297 -75

1993)JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
FORMAT FOR IDEAS FOR RESTORATION PROJECTS

297 75

Title of Project: ESTABLISHING AN ECOLOGICAL BASIS FOR RESTORING AND ENHANCING THE MIXED-STOCK SALMON RESOURCES OF PRINCE WILLIAM SOUND: EARLY MARINE INFLUENCES

Justification: Instream habitat improvement, hatchery rearing, and intensive management are recognized and accepted techniques for restoring and enhancing salmon resources. But, these conventional methods focus exclusively on freshwater and adult lifestages providing no insight into interactions resulting from manipulation of a major component of the marine ecosystem. The scientific literature supports the concept that marine ecosystems are regulated by changes in ocean climate that mediate interactions among juvenile fish and other animals in coastal habitats. Knowledge of these processes is essential to evaluate interactions between enhanced and wild salmon, predict restoration program effects on other ecosystem components, and determine the causes of salmon population changes documented by monitoring programs. Without this fundamental understanding, well meaning but poorly informed attempts to recover from environmental damage may inadvertently lead to far greater biological problems than they are intended to solve.

Description of Project: The goal of this project is to develop an understanding of the salmon ecosystem of PWS for use by restoration program managers. The requested funds will be used to enhance a modest ongoing program called Cooperative Fisheries and Oceanographic Studies (CFOS). The objectives of the project are (1) synthesis and integration of ocean temperature and zooplankton abundance data collected near five hatcheries, (2) description of growth responses of juvenile salmon to lower trophic level changes and subsequent effects on adult production, and (3) development of an understanding of ecosystem interactions that will lead to a predictive capability. Supplemental funding for CFOS will provide a means to continue ADF&G studies of early marine growth and survival, broaden University of Alaska studies of fry feeding dependencies and forage stocks, and allow local hatcheries to maintain substantial oceanographic and plankton watch programs. Work on bioenergetic and trophic models will be stepped up to provide the predictive capability needed by restoration program managers. In aggregate, these efforts will pioneer establishment of a sound ecological basis for restoring and enhancing the salmon resources of PWS.

Estimated Duration of Project: 5 years
Estimated Cost per Year: $385,000

Other Comments: This concept proposal is being jointly submitted by the Alaska Department of Fish and Game, Prince William Sound Aquaculture Corporation, Valdez Fisheries Development Association, Inc., and the University of Alaska Fairbanks.

Name, Address, Telephone:

Dr. Ted Cooney
Inst. of Marine Science
University of Alaska
Fairbanks, Alaska 474-7407

Mark Willette
Alaska Dept. of Fish and Game
P.O. Box 669
Cordova, Alaska 424-3214

ID # 9 615291-73

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration enhancement

✓ Lead Agency

ADF&G

✓ Cooperating Agency(ies)

USFS

0 N Passed initial screening criteria

RS - 105

Type F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

92 15297-73

1993)JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

RS 105

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL 297 73

Document ID Number 920015297

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: SURVEY AND EVALUATION OF INSTREAM HABITAT AND STOCK RESTORATION TECHNIQUES FOR ANADROMOUS FISH (CONTINUATION OF RESTORATION PROJECT NO. 105)

Justification: The Exxon Valdez oil spill severely damaged wild pink and chum salmon populations. Various amounts of oil were deposited in intertidal habitats in Prince William Sound (PWS) where up to 75% of the spawning occurs. Salmon eggs deposited in 1989 and all subsequent years have been contaminated and direct egg mortality has been documented. Recently detected genetic damages resulting from oil contamination in spawning beds may further reduce the productivity and fitness of wild salmon populations for many years to come. This project will identify the most appropriate techniques for restoring or replacing damaged spawning habitats and stocks of anadromous fish utilizing established enhancement methods.

Description of Project: This is an ongoing project conducted cooperatively by the Alaska Department of Fish and Game (ADF&G) and U.S. Forest Service (USFS). The USFS will provide expertise in habitat restoration in PWS, and the ADFG will focus on stock and habitat restoration in the EVOS impact area. The USFS will conduct hydrological surveys at sites in the National Forest, further evaluate fish pass sites identified in oil year 3, and determine appropriate restoration techniques for anadromous fish (salmon and trout) stocks and habitats in the most heavily oiled streams in PWS. The ADFG will estimate the area of salmon spawning habitat damaged by the EVOS in PWS, determine the most appropriate techniques for replacing this habitat within the EVOS impact area, and coordinate with the USFS on evaluation of fish stock restoration techniques. Appropriate restoration or enhancement techniques may include spawning channels and improvement of fish passage through fish ladders, or step-pool structures to overcome physical or hydrological barriers. These measures will provide oil-free spawning habitat to replace oil-impacted spawning areas. Additional wild salmon stock rehabilitation measures may include stream-side incubation boxes, remote egg-taking and incubation at existing hatcheries for fry stocking in oil-impacted streams.

Estimated Duration of Project: 3 years
Estimated Cost per Year: $416,000

Other Comments: This concept proposal is being submitted jointly by the U.S. Forest Service and the Alaska Department of Fish and Game.

Name, Address, Telephone: Mark Willette
Alaska Dept. of Fish and Game
P.O. Box 669
Cordova, Alaska 99574
(907) 424-3214

ID # 920615297 -09

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓝ N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29709

EXXON V EZ OIL SPILL TRUSTEE COUN

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: Lower Cook Inlet Sockeye Salmon Restoration and Enhancement

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Justification: (Link to Injured Resource or Service)

Estuaries which sockeye salmon utilize as nursery areas were oiled to various levels during the EVOS. Any direct or indirect sublethal effects from exposure to oil or other events could jeopardize long-term sockeye salmon production, which currently is extremely important to the Lower Cook Inlet (LCI) commercial fisheries.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The major goal of this project is to develop a LCI sockeye salmon enhancement program to include the annual stocking of sockeye salmon fry into 8 or more lake systems in the LCI area and to fertilize the lakes as necessary with liquid fertilizer. Limnological and biological studies will be conducted to determine and maintain optimum sockeye fry stocking density to maximize production. The rearing potential of additional lakes will be investigated. The lakes are located in the Kamishak Bay, Outer and Southern Districts of the LCI commercial fisheries management area. The rationale for the inclusion of this sockeye restoration and enhancement project includes not only the mitigation of oil related impacts to sockeye smolt survival but also to provide additional terminal commercial harvest areas to displace fishing pressure from natural pink and chum salmon stocks that may have been affected by the EVOS.

Estimated Duration of Project: FY/93 - FY/98.

Estimated Cost per Year: $143,000

Other Comments: This project will provide significant benefits to the LCI area commercial fishery. Approximately 300,000 fish may be harvested annually and fishing effort may be manipulated to minimize pressure on other wild stocks that appear to have been impacted by the EVOS.

Name, Address, Telephone (907) 235-8191

Nick Dudiak/Larry Boyle
Alaska Department of Fish and Game
FRED Division
3298 Douglas Street
Homer, AK 99603

ID # 615297-72

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - enhancement

✓ Lead Agency

ADF&G

✓ Cooperating Agency(ies)

USFS

N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

~~0615297-72

1993)JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON V. EZ OIL SPILL TRUSTEE COUN 297 72

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: RESTORATION OF THE COGHILL LAKE SOCKEYE SALMON STOCK

Justification: The Coghill Lake sockeye salmon stock has historically supported an important commercial fishery in western Prince William Sound (PWS). In recent years, returns have declined from an average of 250,000 to only 25,000 in 1991. Damage assessment studies on juvenile salmon suggest that the Exxon Valdez oil spill may have contributed to the decline of Coghill sockeye stock. Adult migration patterns indicate that Coghill stock juveniles migrated through oil-contaminated areas in western PWS. Juvenile salmon similar in size to Coghill smolts typically utilize nearshore nursery habitats. Damage assessment studies have established that oil contamination reduced the growth and survival of juvenile salmon utilizing these habitats. The Coghill Lake stock is presently at dangerously low levels. Action must be taken to restore the stock before any further decline occurs. Sockeye salmon rear in lakes for one to three years before emigrating to sea. The production of sockeye salmon populations is closely linked to the productivity of rearing lakes. Limnological studies indicate that fry food resources in Coghill Lake cannot support large numbers of fish. Fertilization is needed to increase lake productivity and boost zooplankton abundance until natural nutrient input from salmon carcasses is restored.

Description of Project: The goal of this project is to restore the natural productivity of Coghill Lake and the resident sockeye salmon population through use of established lake fertilization techniques. The project will be conducted cooperatively by the Alaska Department of Fish and Game (ADF&G) and the U.S. Forest Service (USFS). The USFS will be responsible for fertilizer application, and the ADF&G will evaluate the effects of fertilization by comparing lake productivity and fry/smolt growth and survival before and after fertilization. Results from evaluation studies will be used to refine the fertilzation program. Fertilizer will be applied each summer for a five year period equivalent to one sockeye salmon life cycle.

Estimated Duration of Project: 5 years
Estimated Cost per Year: $165,000

Other Comments: This concept proposal is being jointly submitted by the U.S. Forest Service and Alaska Department of Fish and Game.

Name, Address, Telephone: Mark Willette
Alaska Dept. of Fish and Game
P.O. Box 669
Cordova, Alaska 99574
(907) 424-3214

ID # 297-22

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness Salmon

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

~~AD~~ Restoration Manipulation & Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

297-22

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

See Support Comments "Kodiak Island Borough"
92061527 9

* Restoration Framework, 1992, pp 43-44.

EXXON VA EZ OIL SPILL TRUSTEE COUN

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Waterfall Creek Pink Salmon Restoration - Fishpass Improvement**

Justification: (Link to Injured Resource or Service) The Exxon Valdez oil spill directly impacted Little Waterfall Creek in 1989 - Restoration Study 105 (fishpass feasibility) identified a need for fishpass improvements.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Little Waterfall Creek (251-822) is located on Afognak Island and drains into Little Waterfall Bay. Three fishpasses have increased pink salmon spawning area in this system. The largest fishpass furthest upstream, however, is not utilized fully, possibly due to structural problems. The average escapement above this fishpass has been 8,000 while the spawning area will support 30,000-40,000 pink salmon. The Exxon Valdez oil spill directly impacted Little Waterfall Creek in 1989. Beaches in Little Waterfall Bay, as well as adjacent bays, were significantly oiled. In addition, pink salmon escapement in 1989 (117,200), due to harvest closure, was well over the desired optimum escapement of approximately 60,000 pinks. This may have resulted in over utilization of the system as reflected in a very low (69.94) pre-emergent index in 1990. The 1991 escapement was above average, but the total return was below the expected 200,000 at 121,500.

Fishpass improvements at Waterfall Creek will focus on construction and modification to the largest existing fishpass. The angel of descent will be lessened, additional resting tanks will be constructed, and additional steep pass sections will decrease water velocity. This construction will be evaluated through surveys to determine fishpass usage. Minor improvements will be made to the two smaller fishpasses to improve fish passage including diversion structures and gabion reinforcement.

Estimated Duration of Project: Three (3) years

Estimated Cost per Year: $55,000

Other Comments: Fishpass improvements at Waterfall Creek will also benefit coho salmon.

Name, Address, Telephone
Steve Honnold
AK Dept of Fish & Game/ FRED Div
211 Mission Road
Kodiak AK 99615

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 20615298-43

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category: Manip + Enhancmt

Lead Agency: USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

1993)JECT SCORING SHEET 9_ 6 15298-43

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
IDEA[illegible]OR RESTORATION PROJECTS

29843

Title of Project:
Stream Channel Capability Modeling

Justification:
Capability modeling would allow us to address those channels that would give the best benefits to Oilspill restoration strategies.

Description of Project:
Goal: Develop model to analyze stream channel capabilities for supporting fish in Prince William Sound.
Objectives:
-stratify channel types using maps developed, ground-truthed and digitized in project proposed above (Vegetation and stream classification mapping of western Prince William Sound).
-measure fish habitat capability characteristics on represenntative sampleof each channel type most likely to support fish.
-document fish numbers and use on a representative sample of each channel type
-product a cablbility model for use inconjunction with the stream channeltype database
-field test the capability model

Estimated Duration of Project:

Four years

Estimated Cost per Year:

$110,000

Other Comments:

ame, Address, Telephone:

Kate Wedemeyer, Fisheries Biologist
US Forest Service Glacier Ranger Station
PO Box 129
Girdwood, AK 99587
907-783-3242

ID # 9 0615298-36

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon Habitat

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category
Manipul. & Enhancement

Lead Agency
USFS

Cooperating Agency(ies)
ADFG

(Y) N Passed initial screening criteria

type ~ F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

1993)JECT SCORING SHEET

920615298-36

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29836

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Stream Channel Type Classification and Fish Habitat Assessment

Justification: (Link to Injured Resource or Service)

The Oil Spill triggered substantial changes in the fisheries resources and fishing industry. The need for an accurate assessment of fish habitat and production capabilities has never been higher.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The channel typing program will enable resource managers to better predict the effects of land management activities on any given watershed on the District. It also allows managers to predict fisheries habitat capability by channel type. Stream channel type classification was initiated on the District in 1989. Since 1989, mapping and data collection techniques have been refined to produce high quality baseline information on watersheds on the District. In 1993, the District will finalize all manuscripts for data entry into the Forest GIS data base, and will have information available to all management agencies. In addition, the District will be moving into the next phase of the program and begin looking at fisheries habitat components within specific channel types, and develop habitat capability models for watersheds. Channel typing information will completed using Forest Service, Region 10 (R10) standards, and those standards more specifically outlined by the Chugach National Forest Channel Type User Guide. Habitat data will be collected using Hankin and Reeves methods refined by Olsen and Wenger for use in R10. Habitat data will be collected on Montague Island and the West Copper River Delta initially. Sample locations in Eastern Prince William Sound and the East Copper River Delta will be established in successive field seasons.

Estimated Duration of Project: 1993 - 1997

Estimated Cost per Year: 1993-1995 $50,000; 1996 $25,000; 1997 $10,000

Other Comments:

This project will provide baseline information needed to implement Restoration Option No. 2 (Intensify Management of Fish and Shellfish), No. 3 (Increase Management for Fish and Shellfish that Previously Did Not Require Intensive Management), and No. 11 (Improve or Supplement Stream and Lake Habitats for Spawning and Rearing of Wild Salmonids). Since it is part of the Forest GIS data base, there is great potential for synthesizing and transfer of information between agencies, especially as data from other studies becomes available.

Name, Address, Telephone:
Dave Schmid, Fisheries Staff, U.S. Forest Service
Cordova Ranger District, Box 280, Cordova, AK 99574
(907) 424-7661

ID # 9 615270-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

reopen Salmon Hatchery

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

0 N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993)JECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

920615270-0

☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Port Graham Salmon Hatchery

Justification: (Link to Injured Resource or Service) Lost economic and subsistence opportunities relating to the harvest of salmon.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The Port Graham Cannery was the principal employer of Port Graham and Nanwalek residents before its closure in 1989, which was due directly to the oil spill. In order to get processing facilities operating again, Port Graham has embarked upon the Port Graham hatchery program to ensure a long term stable supply of fish for the pocessing plant. The hatchery project will result in an adult return of 3.5 million pink salmon annually, through ocean ranching techniques.

Estimated Duration of Project: Design and engineering, construction, and shakedown: 2 years.

Estimated Cost per Year: Capitol cost: 2.5 million Operating: $250,000 per year

Other Comments: Within six years the facility will be able to support itself.

Name, Address, Telephone:

Tasha Chmielewski
Chugach Regional Resources Commission
3300 C Street
Anchorage, Alaska 99503
(907) 562-4155

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

Valdez
Tatitlek
Eyak
Chenega
Seward

The North Pacific Rim

Document ID Number 920615270 01 02
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

FAX TRANSMITTAL

SENT TO: Exxon Valdez oil spill trustee Council

DATE: 6/15

TIME: 419

Attn:

NO. PAGES INCLUDING THIS PAGE: 3

SENT BY: TASHA C.

IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL AS SOON AS POSSIBLE! (907) 562-4155

ORIGINALS WILL BE SENT VIA:

_____ U.S. MAIL - EXPRESS
_____ U.S. MAIL - FIRST CLASS
_____ HAND DELIVERY
_____ OTHER

NOTE: 2 Projects
01) Port Graham Salmon Hatchery
02) Village Mariculture Project

Faxed by: Irene

3300 "C" Street / Anchorage, Alaska 99503-3920 / Ph. (907) 562-4155 / Fax (907) 563-2891
A Tribal Organization Serving the Chugach Native Peoples of Alaska

TAMAMTA PIGPET
"All of Ours"

ID # 0615298-41

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Follow-up R106 ?

✓ Category

Manip + Enhancement

Lead Agency

USFS

Cooperating Agency(ies)

ADFG

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
IDEAS FOR RESTORATION PROJECTS

29841

Title of Project:
Feasibility of Fishpasses as oilspill restoration
Justification:
Restoration of several fish species could be aided by improved fish passage to previously underutilized habitat.

Description of Project:
Goal: -Restore injured species by improving access to unused or untilized fish habitat

Objective:
-survey PWS for potental fishpasses
-conduct feasibility studies and develop engineering designs

Estimated Duration of Project:

3 years

Estimated Cost per Year:
$25,000

Other Comments:

Name, Address, Telephone:

Kate Wedemeyer, Fisheries Biologist
US Forest Service Glacier Ranger Station
PO Box 129
Girdwood, AK 99587
907-783-3242

ID # C 0615298-37

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category
Manip + Enhance.

Lead Agency
USFS

Cooperating Agency(ies)
ADF&G

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

1993)JECT SCORING SHEET 4, 06152 98-37

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL 24837

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Montague Island Chum Salmon Restoration

Justification: (Link to Injured Resource or Service)

Chum salmon were determined to be an injured species as a result of the Exxon Valdez oil spill. Montague Island remains as one of the best PWS locations for improving wild chum salmon production.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Prior to the 1964 earthquake, Montague Island streams accounted for nearly 8% of the total chum salmon production in Prince William Sound. Habitat alterations caused by the uplift, combined with a number of environmental and man-induced factors, led to the virtual extirpation of chums on the Island. Many of the Island's historic chum producing streams are thought to have stabilized over time to once again support chum salmon populations. However, there is a lack of a sufficient brood source to re-establish numbers of chums within those same streams

The goals of this project are, 1) to re-establish wild stock populations of chum salmon on Montague Island and maintain the genetic diversity of wild chum salmon stocks in Prince William Sound; and 2) to provide mitigation to identified injured species. Once the project is established it could contribute an estimated 300,000 pounds of salmon annually to the common property fishery.

A four-year cooperative chum fry stocking effort in Chalmers river was completed in 1990. This stocking proved successful when more than 1,000 chums were observed returning to Chalmers river. Pending favorable spawning success of these fish, stocking efforts will be expanded to include all historic chum producing streams on Montague Island. Cooperative work with Alaska Department of Fish and Game and Prince William Sound Aquaculture Corporation will continue to identify a source for brood stock and eggs will be collected for culture by 1994.

During 1991, spawning habitat surveys were conducted at proposed stocking locations. Based on the information collected recommendations were made on possible habitat restoration projects for several of the chum salmon streams. These projects will be further evaluated in 1992 for implementation in 1993.

The goals of habitat restoration projects are to accelerate natural stream stabilization, and promote a healthy riparian forest. Projects will include in-stream structure placement, various spawning and rearing habitat improvement structures, and development of a riparian forest prescription. Riparian forest management will include tree planting and tree thinning of selected zones. Through effective silvicultural management these areas can be rehabilitated to provide excellent habitat not only for fish species, but many wildlife species as well.

MEMORANDUM

CITY OF VALDEZ, ALASKA · GATEWAY TO THE INTERIOR ·

TO: Doug Griffin

FROM: Bill Wilcox

DATE: March 9, 1992

SUBJECT: ~~Exxon Settlement~~ Suggestion Costs

The following are rough costs for the suggestions that you had in your memo to Bill Walker dated Jan 27, 1992. Because some of the ideas are general, some of the costs are approximate. Approximate project costs are:

Project	PROJECT COST	ANNUAL COSTS
Oil & Grease Separator/Small Boat Harbor	$ 50,000.00	$ 500.00
Oil & Grease Separator/Fidalgo	150,000.00	5,000.00
Oil & Grease Separator/Hazelet	150,000.00	5,000.00
Valdez Landfill Upgrade	250,000.00	100,000.00
Recycling	100,000.00	50,000.00
Sewage treatment and collection plant upgrade	2,000,000.00	50,000.00
Garbage scow facilities for fisherman's trash	250,000.00	200,000.00
Remedial of existing landfills	4,000,000.00	
Hazardous waste collection and disposal	200,000.00	150,000.00
Landfill liner	1,000,000.00	200,000.00
Maritime wing of museum. Public education facility to display and interpret maritime and natural history of Prince William Sound	2,000,000.00	150,000.00
Oil Spill Cooperative and Training Center	5,000,000.00	500,000.00
Oversight of Oil Industry by City of Valdez		150,000.00
Increased access to Prince W.S.	25,000,000.00	1,000,000.00
Improve Marine Parks	1,000,000.00	100,000.00

P.O. BOX 307 • VALDEZ, ALASKA 99686
TELEPHONE (907) 835-4313 • TELECOPIER (907) 835-2992

	PROJECT COST	ANNUAL COSTS
Assist City handle waste oil	$ 250,000.00	$ 50,000.00
Training of Personnel to handle Environmental Incidents	200,000.00	50,000.00
Improved Public Health Facilities for residents of Prince W.S.	2,500,000.00	250,000.00

Hopefully, the cost will help to assure a better allocation of the Exxon Spill Settlement. This funding should be used to enhance the quality of life of the people most affected, the people of Prince William Sound.

c: Bill Walker, Esq.

ID #_ 20615298-24

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Recreation

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

_____ Category Manipul. & Enhancement

_____ Lead Agency USFS

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

92061529B-24

1995 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: GREEN ISLAND CABIN REPLACEMENT

Justification: (Link to Injured Resource or Service)

Green Island and the Green Island recreational cabin were directly impacted by the Exxon Valdez oil spill. Green Island was in the path of Exxon Valdez crude oil as it flowed out of Prince William Sound. The Chugach National Forest Cabin Use Study showed that Green Island cabin was the most heavily used cabin on the forest for administrative oil spill activities. Oil spill related use exceeded public use in 1989 and 1990. Because of extensive administrative use, few public fees have been collected for the continued maintenance of the cabin.

The cabin continues to provide overnight facilities for post-cleanup activities and monitoring. Green Island is one of the few Prince William Sound locations with significant pre-spill information and is the site of a proposed Research Natural Area. Green Island is centrally located in Prince William Sound with easy access to oil impacted beaches and oil injured resources.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

This proposal will fund the replacement of the Green Island recreational cabin. Due to the increase in oil spill related administrative use at the cabin during the last three years and with no cabin maintenance income from these users, the condition of the Green Island cabin has deteriorated. This cabin was acquired from the USF&WS in 1985 in fair to moderate condition. The cabin is constructed from primarily plywood. Plywood cabins generally do not withstand the Prince William Sound elements well, and deteriorate quickly.

placement of the existing Green Island recreational cabin will insure that post oil spill researchers, and recreating public will have a useable cabin in which to base oil spill related work operations while meeting the needs of the recreating public

Estimated Duration of Project: Two Years, 1993 & 1994

Estimated Cost per Year:

FY 1993	FY 1994	FY 1995	FY 1996	FY 1997
Phase 1	Phase 2	Phase 3	Phase 4	Phase 4
Purchase	Construction			
$20,000	$25,000	–	–	–

Name, Address, Telephone:

Cal Baker, District Ranger
Cordova Ranger District
P.O. Box 280
Cordova, Alaska 99574 (907)424-7661

29837

Project: Montague Island Chum Salmon Restoration (continued)

Estimated Duration of Project: 5 years (1993 - 1997)

Estimated Cost per Year: 1993 - $80,000; 1994-1997 - $75,000

Other Comments:
This project offers a means of minimizing impacts on fisheries within PWS by increasing chum salmon production. This meets the goals of restoration Option Nos. 2 (Intensify Management of Fish and Shellfish) and 18 (Replace Fisheries Harvest Opportunities by Establishing Alternative Salmon Runs). It also provides a means for implementing Restoration Option No. 11 (Improve or Supplement Stream and Lake Habitats for Spawning and Rearing of Wild Salmonids). The Forest Service has expertise in a variety of established techniques for salmonid habitat improvement.

Name, Address, Telephone:
Dave Schmid, U.S. Forest Service, Cordova Ranger District
P.O. Box 280, Cordova, AK 99574
(907) 424-7661

ID # 0615298-33

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category Monit. Manip. + Enhance

Lead Agency
USFS

Cooperating Agency(ies)
ADFG

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

RESTORATION PROJECT IDEAS

29833

Title of Project: Fish Limiting Factors Analysis

Justification: Identification of habitat limiting factors for cutthroat, dolly varden, coho and pink salmon that can guide restoration activities.

Description of Project: Identification of mitigation, protection and restoration measures for injured fish species will require adequate knowledge of the habitat limiting features. For example, if a restoration project proposes to enhance spawning habitat for sea run cutthroat, when in fact freshwater rearing habitat for young of the year fish is limiting their production then, obviously, the restoration efforts will not accomplish the end goal.

Currently, the Chugach National Forest has mapped channel types for most of Prince William Sound. These channel types, which identify broad physical characteristics (e.g., gradient, width, surrounding landforms, and hydrologic process) for a given segment of stream, were mapped using aerial photographs and topographic maps. With ground verification and further delineations of specific habitats present within channel types, this habitat inventory technique could be used to conduct limiting factors analysis to guide restoration, mitigation, and protection measures. We propose to field verify channel type designations and to define specific fish habitat characteristics within channel types used by injured fish species. This information will be used to conduct limiting habitat factors analysis for species such as sea run cutthroat and to predict where non documented populations of injured fish species may exist should mitigation measures be proposed.

The study area will focus on the Nellie Juan, College Fiord, Big Islands, and Gravina management areas of the Chugach National Forest but may be expanded to other areas. Initially, using ADF&G anadromous water maps, along with other sources, streams known to provide habitat for injured fish species will be identified. The fish distribution information will be overlayed on USFS channel type maps to identify areas to focus field verification and habitat surveys.

Habitat surveys will be tiered to channel type designations. A statistically valid sample of each channel type within the drainages known to contain injured fish species will be sampled for presence of habitat and cover. The final step will involve predicting habitat limiting factors for the injured species. Using known habitat requirements along with the habitat surveys that have been tiered to channel types, limiting habitat factors analyses will be developed for the injured fish species.

Project Duration: 2.5 years.

Estimated Cost per Year: Years one and two $125,000/year, Year three $30,000.

Other Comments: None

Name, Address, Telephone:

Bruce Van Zee
Forest Supervisor
Chugach National Forest
201 E. 9th Avenue, Suite 206
Anchorage, AK 99567

Technical contact: Kim Barber 271-2836

ID # 9[illegible]615249-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Salmon Fish

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
✓ Costs

✓ Category

Restoration - enhancement

✓ Lead Agency

ADF&G

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

~~7206158~~
9206152 49-03

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
/			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
/			2. Technical feasibility.*
/			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: Shelter Cove, Cordova. Restoration Project.

Justification: Enhance and restoration of sport fishing in Prince William Sound (PWS) and to offset the economic effects of the spill on the community by enhancing the tourist & recreational fishing industry

Description of Project: Construct fishing piers, campground, rest rooms, fish cleaning stations, and handicap access. Funding to continue the releasing of Chinook and Coho Salmon.

Estimated Duration of Project: 2 Years for construction
5 Years of funding fish release

Estimated Cost per Year: Construction cost $750,000. per year
Fish release cost $50,000. per year

Cordova Fly-Fishers
David A Arruda. President
P.O.Box 1768
Cordova, AK. 99574

(907) 424-5536

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 20615298 - 38

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Fish

/ _____ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

_____ Category

Manip & Enhance

_____ Lead Agency

USFS

_____ Cooperating Agency(ies)

ADFG

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29838

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Anadromous Cutthroat and Dolly Varden Char Habitat Inventory, Evaluation and Restoration

Justification: (Link to Injured Resource or Service)
Anadromous cutthroat trout and dolly varden char were determined to be an injured species as a result of the Exxon Valdez oil spill. Strong downward trends in cutthroat population numbers have been observed since the spill. Emergency clousures have been inacted by ADF&G in some areas of PWS.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The project goal is to determine habitat capability as it relates to population status of sea-run cutthroat trout and dolly varden char on the Copper River Delta and eastern Prince William Sound. Through project development we will gain critical information required to make sound management decisions and direct enhancement and mitigation efforts at maintaining viable populations of sea-run cutthroat trout. Habitat evaluations and inventory work will be completed using the Chugach National Forest stream channel type classification, as well as modified Hankin and Reeves methods for relating habitat to stream type.

While information on population status is limited, strong downward trends have been observed since the oil spill. During the 1991 field season the District began working closely with ADF&G, Division of Sport Fish, in their assessment of population status. The District will continue to work closely with ADF&G in the future. The District will also develop habitat capability models to relate habitat components to population.

Estimated Duration of Project: 1993 - 1995

Estimated Cost per Year: 1993 - $35,000; 1994-1995 - $55,000

Other Comments:
Habitat capability modeling must be a vital part of population modeling. This project will provide critical information on habitat components related to population of two injured fish species. It provides the information needed for Restoration Option Nos. 2 (Intensify Management of Fish and Shellfish) and 5 (Reduce Harvest by Re-directing Sport-Fishing Pressure). Once habitat capability models are developed for various watersheds within Prince William Sound and the Copper River Delta, they will provide the information needed to implement Restoration Option No. 11 (Improve or Supplement Stream and Lake Habitats for Spawning and Rearing of Wild Salmonids).

Name, Address, Telephone:
Dave Schmid, Fisheries Staff, U.S. Forest Service
Cordova Ranger District, Box 280, Cordova, AK 99574
(907) 424-7661

Hatcheries 9206152 97 - 48

ID # 7284

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Same as 9206152 97-49 through 67

9206051 31 — 35
9206082 02, 204
9206165 05
9206051 24

✓ Checked for Completeness

✓ ID stamped/Input completed
Name
✓ Affiliation
Costs

✓ Category Restoration / Manipulation & Enhancement

✓ Lead Agency ADF&G

_____ Cooperating Agency(ies)

_____

(Y) / N Passed initial screening criteria

_____

type F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

29748

EXXON V[illegible]DEZ OIL SPILL TRUSTEE COU[illegible]L

Document ID Number
920615297
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Fort Richardson Hatchery Water Pipeline**

Justification: (Link to Injured Resource or Service) Significant over-escapement of sockeye salmon in the Kenai River, a direct result of the Exxon Valdez oil spill, has led to substantially reduced smolt out-migration. Based on this information, the Department of Fish and Game expects fishing opportunities for sockeye salmon in the Kenai River system to be severely curtailed, or closed altogether during 1993-1995 and possibly well beyond.

Average sockeye salmon sport harvest from the Kenai River during the past five years (1987-1991) has been approximately 175,000 fish. The loss of a major portion of this harvest will displace a significant number of sport fishermen and have substantial negative economic impact. Funding of a water pipeline for the Fort Richardson Hatchery will provide alternative sport fishing opportunities during the years the Kenai fishery is most severely impacted and help offset this loss.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) A water delivery system would be constructed to connect the Municipal Water and Power Plant complex to the hatchery. This system would consist of two pipelines; one connected directly from the Municipal Water Plant to the hatchery providing unheated water while the second would be routed through the Sullivan Power Plant to provide heated water necessary to accelerate fish growth. Dechlorination would be provided and modifications necessary to distribute this new source of water in the hatchery would be made.

Estimated Duration of Project: Construction would require one (1) year

Estimated Cost per Year: Construction cost is estimated at $3,500,000

Other Comments: F. Robert Bell and Associates, and Anchorage engineering firm, performed an engineering analysis in 1991 and found this project to be technically feasible. The Anchorage Economic Development Corporation (AEDC) evaluated the economic impact of this proposal and determined these improvements would have a benefit to cost ratio of 2.8 to 1 and would contribute an estimated $1.56 million annually in personal income. This equates to 54 full-time jobs.

Name, Address, Telephone

Gary Wall
Fort Richardson Hatchery
Fort Richardson AK 99505-0337
(907) 428-1348

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 93-615249-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Hatchery

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: Cutthroat Trout & Dolly Varden Hatchery

Justification: Restoration of stream stocks to levels prior to the oil spill. Information has shown a high mortality rate and slower growth for Cutthroat trout & Dolly Varden in oiled areas. Recreational fishing has been curtailed by emergency closures. If this management practice do not work we must have in place a source to replenish the lost stocks.

Description of Project: Construction of a hatchery building 50' X 40'and outside raceways, to house a maximum of 1 million trout smolt. This facility well be constructed in the Cordova area.

Estimated Duration of Project: Construction 2 Years
Project Duration 20 Years

Estimated Cost per Year: Construction Cost $800,000. per year
Annul cost $150,000. per year.

Cordova Fly-Fishers
David A Arruda. President
P.O.Box 1768
Cordova, AK. 99574

(907) 424-5536

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 1-0615279-24

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Hatchery

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category
Restoration Manipulation or Enhancement

✓ Lead Agency
ADF&G

✓ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9206 15279-24

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

92015279 24

KITOI BAY HATCHERY ON AFOGNAK ISLAND
OIL SPILL SETTLEMENT FUND PROPOSAL

JUSTIFICATION

There appears to be a very strong correlation between salmon run size and early marine rearing conditions. Identifying early marine environmental parameters specific to the Kitoi Bay/Izhut Bay complex which would have been impacted by oil-contaminated waters is extremely important. Implementing restoration requirements for Kitoi Hatchery production requires these types of studies. KRAA's investment into this facility is long-term and requires the type of protection provided by projects such as C.F.O.S.

PROPOSED PROJECT

The Kodiak Regional Aquaculture Association (KRAA) recommends the initiation of a study in the Kitoi Bay/Izhut Bay complex which addresses juvenile salmon survival in the early marine environment. The Kitoi Bay Hatchery produces in excess of 180 million juvenile salmon annually which use this bay complex for early marine rearing. In 1989 this area yielded significant quantities of oil during spill clean-up operations. Since juvenile salmon are very vulnerable to toxic levels of oil-contaminated waters, this bay complex will represent an excellent opportunity for collecting information needed to verify restoration requirements for impacted hatchery production. Currently this type of study is being conducted in Prince William Sound under the category of Cooperative Fisheries and Oceanographic Studies (C.F.O.S.) through the University of Alaska. The Kitoi Bay Hatchery facility is well situated for implementing such a study.

ESTIMATED DURATION OF PROJECT: 1993 through 2001

ESTIMATED COST PER YEAR: $ 45,000 per year

COMMENTS: This proposal addresses Options 2, 3, 11, and 14 in the Exxon Valdez Oil Spill Restoration Framework, Volume I.

CONTACT:

Larry Malloy
Kodiak Regional Aquaculture Association
PO Box 3407
Kodiak, AK 99615
486-6555

Shellfish

ID # 920527041

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

type F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VA[illegible]Z OIL SPILL TRUSTEE COUN[illegible]

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

920527041

Title of Project:
Bivalve Shellfish rehabilitation project

Justification: (Link to Injured Resource or Service)
Vast Areas of clam Beds were destroyed by spill

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
TO Reestablish populations of native Little Neck (Protothaca staminea) Butter (Saxidomus giganteus) and Heart Cockle (Cinocardium nuttalli) clams in those areas of Herring Bay (Knight Island) and other beaches selected as required or most needed.

Bivalve clams are a main source of subsistance life style as well as a potential commercial resource and popular sportfish food. By providing a means of rehabilitation for effected populations earlier than would be naturally occuring, shellfish populations would rebound sooner and become available for common harvest.

Two methods of rehabilitation would be utilized. ① An unaffected beach area would be selected along with nearby parcel for a service building. At this site the beach area would be cultivated to produce maximum number of native clams for transplant to affected beaches.

② several unaffected beaches would also be selected for

Estimated Duration of Project: 10 to 15 years

Estimated Cost per Year: $860,000/yr 1st 3 yrs., $180,000/yr final 11 yrs.

Other Comments: Numerous float plane trips would be required annually to and from broodstock sites, in addition a 22' Aluminum skiff would be needed to move broodstock to relocation sites. This vessel would require a small cabin and twin 150hp outboards

Name, Address, Telephone:
MIKE MOYER
5178 SHORELINE DRIVE
KETCHIKAN, AK 99901
(907) 225-1955

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

(2) cont.

use as broodstock sites. Broodstock sites would be selected on the basis of their ability to produce the required native clams. From these sites clams would be collected annually and transplanted to those beaches selected as having the most need and ability to accept the re-establishment of clams most effectively.

Building requirements:

A.) 40' x 40' single story structure
B.) minimum 250 gal./min seawater pump to structure.
C.) 8 2'x3'x20' holding troughs w/asso. PVC plumbing for each tank.
d.) Aux. diesel generator w/sfd. ≈ 2000 gallon fuel storage.

Location: Cordova or Valdez area

Staff requirements:

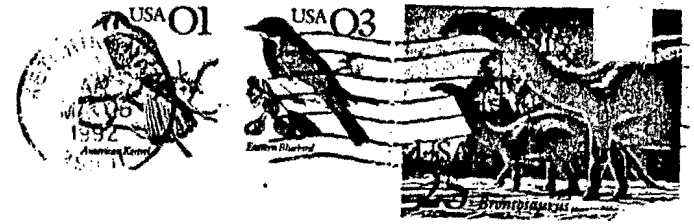
A.) Project leader: Biologist w/min B.S. in marine biology, several years aquaculture exp. + familiar w/sound area.
Salary: $68,000/yr

B.) Three technicians: educated; high school w/local familiarity of sound area & good physical health.
Salary: $1,800/mo. seas./ 4 to 5 mo./year May thru Sept.

P.W.S. Shellfish Rehabilitation Project

Operation Costs: year 1		Annual Costs est. year 2 - 15	
Building	$ 650,000.00	$ 2,000.00	maint.
Salaries	73,400.00	73,400.00	
Boat/motors	65,000.00	500.00	maint.
Permitting	50,000.00	350.00	
Fuel	8,000.00	6,500.00	
Air travel	8,000.00	8,000.00	
Food	8,000.00	8,000.00	
	$ 862,400.00	$ 98,750.00	

M. Moyer
5178 Shoreline Dr.
Ketchikan, Ak
99901



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- [ ] D-PAG
- [ ] E-MISC.

Exxon Valdez Trustee Council
645 G St.
Anchorage, Ak
99501

MAY 27 REC'D

Attn: 1993 Work Plan

ID # 9206183/6-3 +

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manip. or Enhancement

✓ Lead Agency ~~DNR~~ ADF&G

✓ Cooperating Agency(ies) USFS .

(Y) N Passed initial screening criteria

Type : ST

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

9206185.6-3

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDE **IL SPILL TRUSTEE COUNCIL**

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number 92061836-3

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

Coastal Hab

Title of Project:
Kelp regeneration in the upper intertidal

Justification: (Link to Injured Resource or Service)
Lack of kelp regrowth in upper intertidal zone.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

There are two ways to prevent the upper intertidal area from drying out during low tides and assist in the regrowth of the kelp beds and its associated community. One is artificial kelp, i.e., burlap or Engineers Cloth could be anchored at one end and flotation attached to the other. During low tides the artificial kelp should then cover a large area rather than crumble in a small pile. The strips would have to be narrow to keep storm surges from washing the anchors out.

The other technique would be to use divers off a barge to select, move and relocate rocks of a suitable size which contain living Macrocystis from the lower intertidal zone to the upper intertidal zone. These rocks would have to be large enough to stay in place, yet small enough to be moved, at least by a winch on a small barge. The kelp would also have to be large enough to provide some shade, yet small enough to not break off in the shallower water, higher energy zone.

Estimated Duration of Project: One summer - 1993

Estimated Cost per Year: $300,000.00

Other Comments: Both ideas would have a high risk factor. We would probably want to establish a rope grid on the beach to hold the burlap in place.

Name, Address, Telephone:
Martech USA, Inc.
300 E. 54th Av.
Anchorage, AK 99518
Attn: Gary Lawley

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

JUN 18 REC'D

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- [ ] E-MISC.

MARTECH

300 East 54th Avenue
Anchorage, AK 99518
(907) 561-1970

Exxon Valdez Trustee Council
645 G Street
Anchorage, AK 99501

Attn: 1993 Work Plan

ID # ~~9206122 40-02~~

9206122 37-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Coastal Habitat

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Restoration Manipulation or Enhancement

✓ Lead Agency DNR

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

Type: Coastal Hab.

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

~~92061004C-02~~

1993 PROJECT SCORING SHEET 92061237-02

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
__	__	✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓	__	__	2. Technical feasibility.*
__	__	✓	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

02
03
04
05

EXXON VALI OIL SPILL TRUSTEE COUNCI

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
5 Projects

Justification: (Link to Injured Resource or Service)

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

01) ~~Habitat Acquisition = a comment~~

02) Restore Shorelines damaged by beach berm relocation title

03) Institute program to annually clean garbage from oil spill impacted area beaches

04) Publish + distribute brochures on damaged species and ways to prevent additional stress.

05) Institute watchable wildlife survey program to give and receive information with tourism and recreation users.

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments:

Name, Address, Telephone:

Nancy Lethcoe, Pres.
~~Alaska Wilderness~~
Sailing Safaris
Alaska Wilderness
Recreation and Tourism Assoc.
PO Box 1353
Valdez, AK 99686

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

Alaska Wilderness Recreation and Tourism Association

Dave Gibbons
EVOS Restoration Team
645 "G" Street,
Anchorage, AK 99501

Dear Dave,

On behalf of our members operating tourism businesses or recreationally using the oil spill impacted area, AWRTA would appreciate it if the Restoration Team would consider recommending to the Trustee Council the following projects designed to restore lost natural resources and services:

1. Timber buybacks to provide habitat protection for recovery of species damaged by the spill and to protect the area's scenic qualities damaged by the spill from additional harm. — 01

2. Restoration of shorelines damaged by beach berm relocation including the removal of logs and rock debris pushed into adjacent uplands areas and re-planting of damaged beach and uplands areas with local species. — 02

3. Institution of a program to annually clean garbage from oil spill impacted area beaches to help enhance damaged visual quality and habitat. — 03

4. Publication of high quality, full-color brochures on damaged species aimed at recreational users and tourism operators that give information on the following topics: 1) significant aspects of a species' life history and behavior that may be adversely affected by human contact; 2) damages suffered by the species from spill and other causes (disease, human disturbance, etc.); 3) ways to prevent additional stress such as not disturbing seals during pupping and molting periods, use of hydrophones to enhance whale watching at a distance, etc. Distribute the fliers to harbors, Visitor Centers, Tour and Charter boat operators, kayak rental outlets, recreational equipment stores, etc. — 04

5. Institution of a watchable wildlife survey program soliciting input from tourism companies and others on the following topics: a) species observed, — 05

P.O. Box 1353, Valdez, AK 99686. Phone: 907-835-5175. Fax: 907-835-5395

date and number; and b) anecdotal information on human/animal encounters. This information could help document the possible changes and movements in marine mammal populations, give tourism operators and tourists a chance to "participate" in the recovery, 3) document changes, both positive and adverse, in human/animal encounters, and 4) provide planners with information that may be helpful in developing additional programs.

Tourism and recreational users have suffered considerably from the visual damage done to marine and shoreline areas through the loss of marine mammals, removal of intertidal and shoreline zone flora and fauna, beach relocation, and staining and sterilization of beaches. The U.S. F.S. recognizes visual quality as a natural resource; the state and tour operators have spent considerable amounts of money to market Alaska's superscenery and superwildlife viewing opportunities, and consumers choose destinations on the bases of visual quality and wildlife viewing experiences. The ability of the tourism industry to recover from economic damages sustained as a result of the spill depends on the ability of tour operators to deliver a product that lives up to consumer expectations and is competitive with other supersenecry/superwildlife areas in the world.

Respectfully submitted,

Nancy R. Lethcoe

Nancy R. Lethcoe

AWRTA
P.O. Box 1353
Valdez, ALASKA 99686

JUN 12 REC'D

VALDEZ, AK

Document ID Number 920612237

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- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

DAVE GIBBONS
EVOS RESTORATION TEAM
645 "G" STREET
ANCHORAGE, AK 99501

ID # 920615294-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Coastal Habitat

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manip. or Enhancement

✓ Lead Agency DEC

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Re coastal habitat

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
		✓	2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

SUBSISTENCE RESTORATION PROJECT

TITLE OF PROJECT:

Chenega Bay Subsistence Restoration Project.

JUSTIFICATION:

Due to the oil spill, subsistence resources were either grossly polluted or population seriously reduced. Because oil remains in the environment, we believe that further clean up work is necessary.

DESCRIPTION OF PROJECT:

A. Goals: To remove oil from heavily contaminated sites in order to advance restoration.

B. Objective: To remove oil left behind after the FINSAP program, particularly at Sleepy Bay and Evans Island.

C. Location: Southwestern Prince William Sound.

D. Rationale: The NRDA Studies have established that the presence of oil has caused a serious loss of certain population. It follows that as long as oil presents a threat, which it continues to do in areas of gross contamination, that the oil must be removed.

E. Technical Approach: Type A manual pick up.

ESTIMATED DURATION OF PROJECT: 2-5 years.

ESTIMATED COST PER YEAR: $200,000.

OTHER COMMENTS:

Local Response Project activities establish that Chenega is well able to remove oil from the beach front area.

NAME, ADDRESS, TELEPHONE:

CHENEGA CORPORATION
Charles W. Totemoff, President
P.O. Box 60
Chenega Bay, Alaska 99574
(907) 573-5118

ID # 920615 298-35

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Coastal Habitat

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category Manip + Enhance

Lead Agency USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: CH

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

1993 PROJECT SCORING SHEET 9706152 98 -35

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29835

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
FORMA OR IDEAS FOR RESTORATION PROJ

Title of Project:
Restoration and Mitigation of Essential Wetland Habitats for Injured Prince William Sound (PWS) Fish and Wildlife Species

Justification: (Link to Injured Resource or Service)
Intertidal marine habitats adversely affected by the Exxon Valdez oil spill, especially tidally influenced wetland vegetation, would be supplemented by long term enhancement activities in both riparian and floodplain habitats in San Juan Bay, Montague Island.

Description of Project:(e.g. goal(s), objectives, location, rationale, and technical approach)

Goal:
To improve the status of waterfowl, anadromous fish and furbearing species impacted by the oil spill in Prince William Sound.

Objective:
Create pools and ponds in riparian and flood plain areas to restore associated aquatic vegetation. Minimize large mammal predation on waterbirds through use of appropriate nesting islands and cover distribution. A broad spectrum of Prince William Sound species will benefit.

Location: San Juan Bay, Montague Island

Rationale:
Past events associated with the 1964 earthquake drained the former lake within the San Juan Bay Drainage. Periodic flooding occurs, but this is a temporal event which happens during periods of high, nearly continuous rainfall or in combination with melt of the snowpack and high volume runoff. Downcutting of the channel has changed the character of the stream along a major portion of its course through lake bed deposits. The amount of pool habitat has been reduced and adjacent sedge meadow, some containing temporary ponds, is undergoing plant succession to shrub and forest growth. Opportunities exist for long term improvement of PWS waterfowl, furbearer and anadromous fish habitat within the stream and in the adjacent wet meadow zones. Eventual outcomes would be a stream and adjacent pond/wetland system within newly established spruce/hemlock forest.

Technical Approach:

Year 1. Feasibility, including soils, hydrology and project planning work. If acceptable, Complete an EA and/or EIS. Submit for public review.

Year 2. If approved, complete project design and cost estimates and submit for the Corps of Army Engineers 404 permit.

Year 3. Commence the project construction activity leading to appropriate instream structures and adjacent wetland habitat formation.

Year 4. Monitor the project relative to meeting the objectives and to assure soil stability and acceptable revegetation of the site.

year 5. Continue to monitor the project and assess wildlife/fisheries activity.

Estimated Duration of Project: 5 to 10 years (possibly two or more phases)
Estimated Cost per Year: $200,000 Average over 5 years (approximate estimate)
Other Comments: Coordinate project logistics with the Montague road access.

Name, Address Telephone:

Bruce Van Zee
Forest Supervisor
201 East 9th, Suite 206
Anchorage, AK 99501

Technical Contact: Ken Holbrook

Oil Spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 920615298-54

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category Manipulation of Enhancement ~~Habitat Prot/Acq~~

Lead Agency ~~USFS~~ HPWG

Cooperating Agency(ies)
USFS

(Y) N Passed initial screening criteria

Type ~~Ident.~~ C-H

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-54

1995 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29854

EXXON V[illegible]EZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

TITLE OF PROJECT:
Restoration of second growth habitat for wildlife in Prince William Sound

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JUSTIFICATION:
Several species of wildlife damaged by the Exxon Valdez oil spill require old growth forest habitat. This proposal will manage previously harvested forest stands on federal lands to accelerate development of old growth components needed for these damaged species.

DESCRIPTION OF PROJECT:
The Prince William Sound area has several watersheds on National Forest lands where timber harvest occured in the early 1970's witnout present knowledge of stand structure required for wildlife. As a result of this it will take up to 75 years longer for these stands to become valuable habitat for old growth dependent species. This project will evaluate the existing second growth stands within riparian and beach fringe zones for potential habitat enhancement. Management options could include pre-commercial thinning to maintain understory components as will as increase growth of spruce trees to more rapidly develop old growth structure, understory planting in riparian zones to convert the area to a spruce stand as it was prior to harvest. The most common damaged species that depend on these habitat types are: harlequin duck, marbled murrlet, river otter, and bald eagle.

ESTIMATED DURATION OF PROJECT: 5 years

ESTIMATED COST PER YEAR: $40,000

OTHER COMMENTS: This project falls within the category of habitat protection and aquisition and manipulation of resources since the objective is to rehabilitate habitats for injured species. This project will implement restoration option number 11 (improve or supplement stream and lake habitats) and number 25 (protect or aquire upland forests and watersheds, establish or extend buffer zones for nesting birds).

NAME, ADDRESS, TELEPHONE:
Dan Logan, Wildlife Biologist, U.S. Forest Service
Cordova Ranger District, Box 280, Cordova AK. 99574
(907) 224-7661

ID # 12061S-2735

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ID stamped/Input completed
- Name
- Affiliation
- Costs

✓ Category ~~Restoration Management Actions~~ Manipulation & Enhancement

✓ Lead Agency
DEE

✓ Cooperating Agency(ies)
DOI - USGS

(Y) N Passed initial screening criteria

Type: Coastal Hab

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920618275

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
		✓	2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR [illegible]AS FOR RESTORATION PROJ[illegible]S

920528045

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

Title of Project:

Beach sub-surface oil recovery

Justification: (Link to Injured Resource or Service)

To reduce leaching of oil, to speed up sub-surface recovery

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Identify the most heavily oiled beaches and implement a plan to flush sub-surface oil. boom and recover .

Clean-up

Estimated Duration of Project: 4 months

Estimated Cost per Year: no idea

Other Comments:

Name, Address, Telephone:

Kelly G. Carlisle
Box 731
Whittier, Ak. 99693

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

P.O. Box 608
Whittier, Alaska 99693

Document ID Number
92052804S

MAY 28 REC'D

- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

MAY 27 '92

L.J. Evans
Exxon-Valdez Oil Spill Restoration Team
645 "G" Street
Anchorage, AK 99501

It is unfortunate that th opportunity for meaningfu nput into the PWS restoration process was impaired by these misunde.. .andings. The question is: how can we, collectively, avoid such disappointments in the future? This leads to my more general comments about the public ~~ocess.

Logistically, the restoration team should develop a single point of contact in each community and clearly define the expectations for local support and assistance.

Advertising the meeting and publicizing the issues to be discussed should be coordinated with strong support from the restoration team.

Lack of attendance at these public meetings, particularly relating in any way to the *Exxon-Valdez* oil spill, is often misconstrued to mean there is a lack of interest by the citizens of this region. I do not find that to be true; rather, most people in this community are willing and anxious to engage in lengthy discussions about the spill, the response, the cleanup, lingering impacts, restoration, and contingency plans. The record will indicate that a great number of people have expressed their concerns on numerous occasions. The diminishing attention to these issues may very well have resulted from that effort on the part of the public in the past seemingly not having any effect on decision-making.

As we discussed on the phone, one way for the restoration team to get a clear understanding of the concerns and priorities of the residents of the region impacted by the *Exxon-Valdez* oil spill is to review the voluminous record of public testimony already given in this regard. Indeed, the testimony the restoration team would have heard in Whittier rom myself and others would have included the following questions, all f which have been expressed on numerous occasions in the past:

-- What is the status of shellfish studies, particularly shrimp? Are there any indications about the revitalization of that fishery in Prince William Sound?

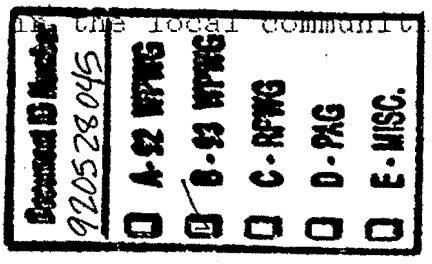
-- Are there studies underway to determine the extent or implications of oiled sediments that have settled to the bottom in deep water areas beyond the intertidal zones?

-- How does the restoration team plan to address the issue of contaminated blue mussels and their effect on the food chain?

-- To what extent will "restoration" mean "further removal of oil from selected beaches"? Are there plans to specifically address the concerns of subsistence users that may include further cleanup? Are traditional recreation areas going to be restored to allow unimpaired use?

-- Will restoration include the field testing of new beach cleanup technology, particularly to remove and recover the large quantities of subsurface oil?

-- Will the restoration team have a presence in the local communities of



Prince William Sound and the rest of the impacted region? Will there be local offices? Wil job announcements be post locally?

Notably, these are all questions, but questions that embody the local concerns about our economic interests, the overall ecological recovery process, and the social and cultural well-being of our community and our neighbors. Few of us have the time to adequately study the restoration publications and provide meaningful critique or recommendations. In my opinion, the process would be much improved if the restoration team spent time in the communities, talking about local concerns and explaining the priorities and limitations of the settlement agreement. For the best possible results, this dialogue should take place before so much effort has been put into formulation of the proposed plans.

Because local residents are directly and adversely affected by the oil spill impacts to the natural resources, it is reasonable to expect that positive impacts may result from the restoration projects. Unfortunately, during three years of cleanup that expectation did not materialize. It is difficult to believe that a $2.5 billion project could take place in a region which is simultaneously experiencing a decline in economic health. I think I told you about a 1990 meeting with Admiral Kime and the Oiled Mayors. I listened to local government representatives from Cordova to Kodiak discuss the process of social and economic healing taking place in their communities. Mayor Fink was the last speaker and made it clear that he did not agree with the opinions of the oiled mayors. He indicated that the *Exxon-Valdez* cleanup had been the best thing to happen to Anchorage in several years. Most of us in the impacted region do not want the restoration process to be the second best thing that happens in Anchorage.

The quality of the restoration process will be much enhanced if local concerns and knowledge are fully incorporated. That takes more than a two or three hour stay and a public hearing. It requires a presence in the region, the ability to listen to the local people, and a mechanism for utilizing local resources. The end result will provide a better chance for restoration, probably cost much less, and will generate more public confidence in the process.

I am enclosing a written comment from Kelly Carlisle, Mayor of Whittier, who left for commercial fishing on May 13th. Three people in the community are reviewing the restoration publications and may provide additional written comments.

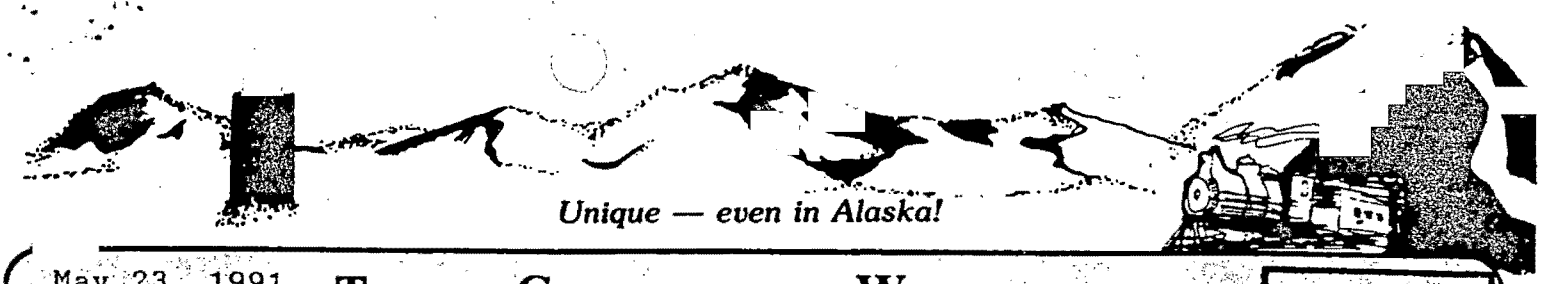
I hope we have an opportunity to discuss these matters further. The task of assuring public input into the restoration process is a difficult one, and I appreciate your determination and efforts.

Sincerely,

Lynda Hyce

Lynda Hyce
Acting City Manager

c.c. Mayor Kelly Carlisle



May 23, 1991 **THE CITY OF WHITTIER**

Document ID Number
920528045
☑ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

also copy to q

L. J. Evans
Exxon-Valdez Oil Spill Restoration Team
645 "G" Street
Anchorage, AK 99501

Subject: Public Meeting in Whittier & Additional Comments

Dear L.J.:

As we discussed last week, I want to apologize on behalf of the City of Whittier for the confusion and misunderstandings that led to a less-than-successful public meeting here in Whittier. First of all, let me attempt to explain some specifics, then I will continue with some general comments about how the public process might be improved.

The week during which the E-V Restoration Team meeting was scheduled here in Whittier was a very busy one for us. The Regional Citizen's Advisory Council held its quarterly meeting here all day Friday, and RCAC's Oil Spill Prevention and Response Committee met Thursday afternoon from 1 to 5. In addition, the community was preparing for the first annual Prince William Regatta to kickoff from here on Saturday a.m., and the Black Cod commercial fishing opening was moved up to May 15 from May 18.

My own confusion about the time change occurred because I attempted to finalize all arrangements for these events early in the week, coordinating with my assistant Connie O'Guinn. On Tuesday, she had not received verification from you that the time change was approved. She did, however, clarify the location of the meeting with your office at that time and inquire about any assistance the restoration staff would need. Had we known before Thursday afternoon that transportation was necessary, we would have made those arrangements. When the request for transportation was received Thursday, some erroneous assumptions were made since, at the time, I was on my way to Portage to pick up another party.

I must admit I was surprised when I arrived at the Council Chambers at about 5:45 and found no one there. I spoke to several other people who were also there, and we waited until after 6 PM to decide that for some reason the meeting was not taking place. Some RCAC folks had come to Whittier Thursday evening specifically to attend the E-V Restoration meeting. I understand that your people were not clear about the location and ended up at the OSPRC meeting in the BTI which explains where they were at 6 PM.

P.O. Box 608 Whittier, Alaska 99693 (907) 472-2327

ID # 920528045

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
Affiliation
Costs

✓ Category

Restoration - manipulation

✓ Lead Agency

DEC

_____ Cooperating Agency(ies)

_____

Y (N) Passed initial screening criteria

_____

Type Coastal Hab

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

RAPID RESTORATION OF WEATHERED CRUDE-CONTAMINATED BEACH SUBSURFACE MATERIAL

Justification: (Link to Injured Resource or Service)

Complete beach decontamination with immediate production of clean beach material and associated wash waters.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

A pilot-scale demonstration of a real-time beach material decontamination process is proposed. The objective of the demonstration is to refine a conceptual treatment process to a workable, full-scale system. The treatment process involves: 1) cobble and soil washing to remove weathered crude from beach material; 2) on-site separation and concentration of the crude from the wash water using hyperfiltration; and 3) biodegradation of concentrated crude in bioreactors. The benefit of this process is that beach materials are immediately cleaned and returned to the beach of origin. Large volumes of crude-contaminated water (low contaminant concentration) are immediately cleaned producing low volumes of highly concentrated waste water; clean water can be discharged immediately. The bioreactors can be small, minimizing nutrient and bacteria requirements. The overall benefit of the pilot-study is to prove the process and provide engineering data for full-scale units.

Estimated Duration of Project: 9 months

Estimated Cost per Year: $800,000 (entire project)

Other Comments:

The project as envisioned by SBP Technologies, Inc. would be directed by two co-investigators: James G. Mueller, Ph.D. (SBP) and Allen Mearns (NOAA), both experienced Prince William Sound investigators.

Name, Address, Telephone:

Dr. Clayton R Page, III
SBP Technologies, Inc.
2155-D West Park Court
Stone Mountain, GA 30087
(404) 498-6666

ID # 720615268

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

C Checked for Completeness

- ID stamped/Input completed
- Name
- Affiliation
- Costs

✓ Category Restoration Manipulation and/or Enhancement

C Lead Agency DEC

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: Coastal Hab.

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9:3645 2 BG

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

IDEAS FOR RESTORATION PROJECTS

Title of Project: Hydrodynamic purging of oil from contaminated beaches, Prince William Sound, Alaska

Justification: Washing oil from the beaches of Prince William Sound using hot- and cold-water washes was not as effective as desired in removing oil. Water applied to the beach during low tide washed only some of oil into the Sound, where it was skimmed or soaked up with oil absorbent material. Water applied to the beach also creates a strong downward flow of water into the beach materials. This downward flow carried contaminants into the beach substrate where contamination may persist for many years. A preferred alternative would move water and contaminants upward toward the surface.

Description of Project: Technology in the form of high-speed, air-rotary drill rigs is available to rapidly and cleanly install injection wells to modest depths. If the depth of installation is 20 ft or less, several wells can be installed in an hour, and water can then be injected beneath the oil layer. This injection will cause upward migration of water and oil to the surface where the oil can be skimmed off and removed. If water can be effectively injected in sufficient quantities, the hydrodynamics of ground-water flow will aid removal of the oil rather than hinder it, as is the case for surface washing. The fundamental process is simple; however, the application of the method has many problems and uncertainties. How closely must the wells be spaced? Will the upward flow of water create sand boils which would temporarily increase sediments in the water column? Will the quantity of oil removed be adequate to justify the expense? Can nutrients also be injected through the wells to increase microbial activity and degrade the oil faster? The objective of the project will be to determine whether hydrodynamic purging of oil using injection wells is desirable, environmentally sound, and cost effective.

Two test sites will be chosen: one on a coarse beach and one on a sand beach. A series of injection wells and monitoring wells will be installed using a track-mounted, air-rotary drill rig. The injection wells will be installed to 20 ft or to the top of bedrock, whichever is less. High volume pumps will be connected to the wells and water will be injected during low tide when the beach is exposed. The beach will be physically inspected for sand boils, blow-outs, and other evidence of paths in which flow rates are too high. Pumping rates will be adjusted to minimize surface disruption. Oil purged to the surface will be skimmed with absorbent materials. Pumping will then be continued through a tidal cycle or longer. Water levels and directions of ground-water flow will be monitored. Quantities of oil removed will be estimated. Well spacing will also be varied to improve flow to the surface.

Following the first year's experiments, computer models of the hydrodynamic system will be created to optimize the pumping rates and well spacing to remove oil without undesirable environmental effects. The models will only simulate the water, not the two-phase oil-water mixture, but can be used to optimize pumping. The models and the results of the first year's activities will be used for additional field tests during 1994. One or more of the sites will be monitored for an extended period of time. That monitoring is not part of the present proposal, however.

Estimated Duration of Project: Two years

Estimated Cost per Year: $500,000

Other Comments: The project will incur substantial costs for contractual services for the drill rig and the barge to transport the rig. Actual costs will depend on these contractual requirements.

Name, Address, Telephone:

Philip J. Carpenter, District Chief

U.S. Geological Survey

4230 University Drive, Suite 201

Anchorage, AK 99508-4664

(907) 786-7100

COVER WORKSHE[illegible] FOR 1993 IDEA SUBMISSIONS

Clean-up

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration enhancement

✓ Lead Agency

~~NOAA~~ DEC

_____ Cooperating Agency(ies)

USFWS

N Passed initial screening criteria

#2: Coastal Hab.

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

RAPID RESTORATION OF WEATHERED CRUDE-CONTAMINATED BEACH SUBSURFACE MATERIAL

Justification: (Link to Injured Resource or Service)

Complete beach decontamination with immediate production of clean beach material and associated wash waters.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

A pilot-scale demonstration of a real-time beach material decontamination process is proposed. The objective of the demonstration is to refine a conceptual treatment process to a workable, full-scale system. The treatment process involves: 1) cobble and soil washing to remove weathered crude from beach material; 2) on-site separation and concentration of the crude from the wash water using hyperfiltration; and 3) biodegradation of concentrated crude in bioreactors. The benefit of this process is that beach materials are immediately cleaned and returned to the beach of origin. Large volumes of crude-contaminated water (low contaminant concentration) are immediately cleaned producing low volumes of highly concentrated waste water; clean water can be discharged immediately. The bioreactors can be small, minimizing nutrient and bacteria requirements. The overall benefit of the pilot-study is to prove the process and provide engineering data for full-scale units. In addition, short and long-term ecological impacts of implementing the potential remedial action on a practical scale will be assessed.

Estimated Duration of Project: 9 months

Estimated Cost per Year: $800,000 (entire project)

Other Comments:

The project as envisioned by SBP Technologies, Inc. would be directed by two co-investigators: James G. Mueller, Ph.D. (SBP) and Allen Mearns (NOAA), both experienced Prince William Sound investigators.

Name, Address, Telephone:

Dr. Clayton R Page, III
SBP Technologies, Inc.
2155-D West Park Court
Stone Mountain, GA 30087
(404) 498-6666

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

SBP Technologies, Inc.
2155-D West Park Court • Stone Mountain, Georgia 30087 • (404) 498-6666 • FAX (404) 498-8711

Date: 6-15-92

FACSIMILE TRANSMISSION

TO: Dave R. Gibbons

Company: Exxon Valdez Oil Spill Restoration Team

Fax Number: 907-276-7178

FROM: Clayton Page

Comments:

Total Number of Pages (Including Cover Sheet): 2

ID #_ 20616307

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Intended

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manipulation or Enhancement

✓ Lead Agency USFS

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

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Type: CH

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

MOSS LANDING MARINE LABORATORIES
CALIFO. STATE UNIVERSITY FRESNO. HAYWARD. SACRAMENT FRANCISCO. SAN JOSE. STANISLAUS

P. O. BOX 450
MOSS LANDING . CA USA
95039-0450
(408) 633-3304

10 June 1992

To: Exxon Valdez Oil Spill Trustee Council

Re: Format For Ideas For Restoration Projects

Title: Restoration of high intertidal Fucus following the Exxon Valdez oil spill.

Justification:

The upper intertidal zone in Prince William Sound is dominated by the brown alga Fucus gardneri. The upper half vertical meter of the Fucus zone has not recovered from the Exxon Valdez oil spill. After three years, we estimate that 10 hectares of rocky shore in Herring Bay alone are still nearly barren, while control areas average 80 percent cover of Fucus. This high intertidal habitat is unique because it is almost always exposed to air. This means that it is a harsh environment for recruitment and recovery, but also important to shorebirds and terrestrial organisms that frequent the intertidal habitat.

Description of project:

The purpose of this project is to learn how to restore Fucus to the upper intertidal regions of the rocky shores of Prince William Sound. Once the techniques are developed, they can then be used at a larger scale on damaged locations, or immediately following future oil spills.

We are currently involved with projects developed to test the success and cost versus benefit of transplanting individuals and whole assemblages of Fucus. These studies should be continued to determine long term results.

We have also developed, based on our current studies, two methods of temporarily modifying the upper rocky shore to enhance Fucus recruitment and growth. However, there have been no funds for field tests. The methods include a simple seawater trickle irrigation system and seeded mesh substratum modifier. Details are discussed in our past proposals and will be fully developed again when there is more space allotment in upcoming proposal requests.

Estimated duration of project: 2-3 years

Estimate Cost per Year: $ 65,000

Name, Address, Telephone:

Dr. Andrew De Vogelaere
P.O. Box 450
Moss Landing, CA 95039
(408) 633-5856
(408) 728-2822
FAX (408) 728-1056

Dr. Michael Foster
P.O. Box 450
Moss Landing, CA 95039
(408) 633-3304
FAX (408) 753-2826

Dr. A. De Vogelaere
MOSS LANDING MARINE LABORATORIES
P.O. Box 450
Moss Landing, CA USA
95039 - 0450

JUN 16 REC'D
Document ID Number
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- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RFWG
- [ ] D-PAG
- [ ] E-MISC.

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

Attn: 1993 Work Plan

ID # 9206102 29-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Manipulation + Enhancement

✓ Lead Agency

USFS

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

Type: CH

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920610229-01

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
		✓	2. Technical feasibility.*
		✓	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: *Fucus* Restoration Feasibility Study

Justification: (Link to Injured Resource or Service)
The dominant algal species, *Fucus*, in the intertidal was severely damaged by the oil spill and subsequent clean-up and has not yet recovered.

Description of Project: (e.g. goal(s), objectives, location, rationale, technical approach)
Goals: Restore *Fucus* populations to the upper intertidal zones affected by the oil spill and subsequent clean-up activities.
Objective: To determine the feasibility of restoring *Fucus* by reseeding the affected areas on a biodegradable substratum.
Location: Experiments will be conducted in Herring Bay, Knight Island, Prince William Sound.
Rationale: Early results of our experiments in Herring Bay indicate that natural recruitment of *Fucus* in some habitat types will be very slow. Large areas of rocky intertidal habitat in Herring Bay, for example, which were intensely cleaned during the summer of 1989, are still devoid of *Fucus* populations due to reproductive failure. Attempts to grow *Fucus* germlings on seeded plates failed due to desiccation and the effects of high substrate temperature. The recovery of *Fucus* on denuded sites can be enhanced by providing microhabitats with conditions more suitable for embryo survival and growth, i.e. higher moisture and lower substrate temperatures. We plan to provide these conditions with biodegradable erosion-control fabric.
Technical Approach: In this study we propose to test a method of restoring *Fucus* populations to affected areas by using biodegradable erosion-control fabric that has been seeded with *Fucus* embryos. There are many versions of this product developed for a variety of terrestrial applications. We will conduct a series of tests to determine the optimum fabric type to maintain sufficient moisture for embryo survival yet provide enough open space for light and growth of juvenile plants. We will eliminate the potential egg dispersal problem by seeding the erosion-control fabric with *Fucus* embryos or by including fertile adult plants. We will also provide unseeded strips of fabric to test whether embryo seeding is necessary to produce new populations of plants in these environments. The cost effectiveness of this procedure for large scale restoration will be assessed.

Estimated Duration of Project: Two Years

Estimated Cost per Year: $70,000

Other Comments: This project could be combined with the *Fucus* recovery monitoring studies to realize cost savings, especially with respect to logistics. This is a cooperative project with Coastal Resources Associates.

Name, Address, Telephone:

Dr. Michael S. Stekoll
University of Alaska
11120 Glacier Highway
Juneau, AK 99801
907-789-4579

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 9615279-29

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

✓ ID stamped/Input completed
Name
✓ Affiliation
— Costs

✓ Category

manipulation & Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type. F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

ENHANCEMENT OF THE PACIFIC HERRING

JUSTIFICATION:

The Exxon Valdez oil spill impacted areas of Kodiak and the Shelikof Straits coastline containing spawning habitat for the Pacific Herring, Clupea harengus pallasi.

DESCRIPTION OF PROJECT:

Enhancement of these impacted stocks will consist of the construction of a towable netpen, the culture of appropriate algal substrate, the capture and transfer of herring to the netpen, the towing of the netpen to a protected site, the installation of predator barriers, transfer of algae to the netpen, the spawning of herring on the substrate, the release of spawned herring, the protection of fertilized eggs through incubation and hatching.

ESTIMATED DURATION OF PROJECT: 9 Years.

ESTIMATED COST PER YEAR:

FY 93	$120,000
1994 - 2001,	$40,000 per year
Total	$440,000

OTHER COMMENTS:

This proposal addresses Options 2 and 3 in the Exxon Valdez Restoration Framework, Volume I.

NAME, ADDRESS, TELEPHONE:

Mark Donohue
Kodiak Area Native Association
402 Center Ave.
Kodiak, AK 99615

907-486-5725

ID # 297 - 69

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration/Manipulation's Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

297-69

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

See Support letter Kodiak Island Borough #920615279

"Comment"

* Restoration Framework, 1992, pp 43-44.

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Document ID Numbe: 92001529?

- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: RED LAKE SALMON RESTORATION

Justification: (Link to Injured Resource or Service)

Red salmon system injured due to overescapement in 1989 due to Exxon Valdez oil spill. This project is directly related to results found in NRDA #27.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The sockeye salmon run at Red Lake appears to have been damaged by overescapement in 1989 as a result of the Exxon Valdez oil spill. Data gathered under NRDA #27 damage assessment, showed low levels (255,000) of migrant smolt and hydroacoustics biomass (100,000) at Red Lake. In order to counter and mitigate this loss, we propose to improve egg to fry survivals.

In the event that Red Lake's sockeye salmon escapement does not reach 150,000 by August 1, the fish cultural activity will commence. To improve egg to fry survival, a total of 6 million early run Red Lake sockeye salmon eggs will be taken by August 30, 1993. The eggs will be transported and incubated in a module at the Pillar Creek Hatchery in Kodiak. Fry will be reared until emergence and then flown back to Red Lake in May 1994.

Estimated Duration of Project: 1993-1996

Estimated Cost per Year: $72,000

Other Comments: 1994 to 1996: $72,000 per year - Continuation of R113

Name, Address, Telephone

Lorne White
AK Dept of Fish & Game
FRED Division
211 Mission Road
Kodiak AK 99615

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 297-70

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category Restoration Manipulation & Enhancement

✓ Lead Agency ADF&G

____ Cooperating Agency(ies)

____

(Y) N Passed initial screening criteria

Type F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned ____

297-70

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

See in Comments pile, Support letter from Kodiak Island Borough.

#92061527?

* Restoration Framework, 1992, pp 43-44.

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Document ID Number
920615297

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- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: RED LAKE MITIGATION FOR RED SOCKEYE SALMON FISHERY

Justification: (Link to Injured Resource or Service)

Sockeye salmon system injured due to overescapement in 1989 due to Exxon Valdez oil spill. This project is directly related to results found in NRDA #27.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The sockeye salmon run at Red Lake appears to have been damaged by overescapement in 1989 as a result of the Exxon Valdez oil spill. Data gathered under NRDA #27 damage assessment, showed low levels (255,000) of migrant smolt and hydroacoustics biomass (100,000) at Red Lake. In order to counter and mitigate this loss, we propose to mitigate fishery displacement/loss by rearing underyearling sockeye salmon smolt to create a mitigation fishery of 125,000 sockeye salmon between 1994 and 1995.

There are currently 2,500,000 Afognak Lake sockeye salmon fry incubating in the Pillar Creek Hatchery which could be reared in brackish water net pens to 3 gram size smolt. The fish were originally intended to be stocked in barren lakes, but could be used for mitigation purposes. At a mean survival rate of 5%, we could expect a fishery of 125,000 sockeye salmon between 1994 and 1995. In 1993-1995, this program would be repeated with a 5,000,000 smolt each year.

Estimated Duration of Project: 1993-1996

Estimated Cost per Year: $143,000

Other Comments: 1994 to 1996: $143,000 per year

Name, Address, Telephone

Lorne White
AK Dept of Fish & Game
FRED Division
211 Mission Road
Kodiak AK 99615

ID # 297-20

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration Manipulation & Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

297-20

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

See support letter Kodiak Island Borough in Comments file # 9206152?9

* Restoration Framework, 1992, pp 43-44.

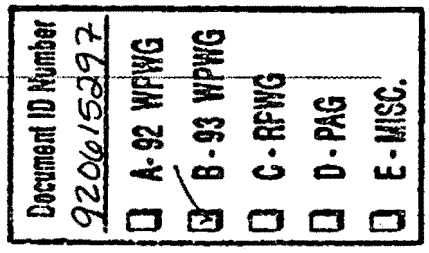
FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Cold Creek Pink Salmon Restoration**

Justification: (Link to Injured Resource or Service) Ishut Bay, on Afognak, and Shuyak Island were directly impacted by oil in 1989, significant amounts of oil was again found in 1990. Restoration Study R105 identified Cold Creek as a potential site for fishway improvement work.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) Cold Creek (252-331) which is located on Afognak Island and drains into Kazakof Bay, was surveyed for fishpass feasibility in 1992 as identified in Restoration Study 105. This system has a steep gradient 200 yards from the estuary that impedes migration of pink salmon to spawning areas. Feasibility surveys indicate that this barrier can be altered in such a way to allow fish passage. Surveys also determined a significant amount of spawning area above the barrier is presently under-utilized.

This project would require placement of steep pass section to bypass the 15' barrier. A channel would also be cut leading into the upstream end of the steep pass. Water diversion structures such as gabions, reinforced with steel pipe and rebar, would divert water into the channel and steep pass. Cable would be anchored into the rock substrate to secure the steep pass. This project would be evaluated by stream surveys during the peak pink salmon spawning period.



Estimated Duration of Project: Two (2) years

Estimated Cost per Year: $16,500

Other Comments: This project would also allow increased barrier passage of coho salmon.

Name, Address, Telephone
Steve Honnold
AK Dept of Fish & Game/ FRED Div
211 Mission Road
Kodiak AK 99615

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 297-2.1

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration Manipulation ? Enhancement

✓ Lead Agency

ADF & G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

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Type F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

See support letter from Kodiak Borough "Comments" # 920615279

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

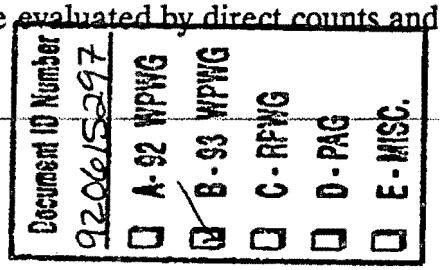
FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Horse Marine Creek Pink Salmon Restoration**

Justification: (Link to Injured Resource or Service) Alitak Bay, in close proximity to Olga Bay (outlet) was oiled in 1989 - Restoration Study 105 evaluated barrier falls and need for steep pass.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) Horse Marine Creek (257-402) is located in the southwest area of Kodiak Island and drains into Olga Bay. Although Olga Bay was not directly impacted by oil contamination, Alitak Bay was significantly oiled. Horse Marine will benefit areas that were directly affected on southern Kodiak Island. This system was evaluated through Restoration Study 105 to determine if a barrier falls could be bypassed to allow pink salmon access to a significant amount of spawning area above the falls.

This system will require 1-2 steep pass sections to bypass the 25' barrier falls. A thorough engineering survey will be conducted. Steep pass sections will be helicoptered to the site and a helicopter will be used to place steep pass sections in the creek after site preparation. Site preparation will consist of removing rock and debris. Fishpass sections will be anchored by cable and water will be diverted into steep pass by use of gabion and cement diversion walls. Fish passage will be evaluated by direct counts and stream surveys.



Estimated Duration of Project: Three (3) years

Estimated Cost per Year: $27,500

Other Comments: Horse Marine Creek restoration will also benefit sockeye and coho salmon.

Name, Address, Telephone
Steve Honnold
AK Dept of Fish & Game/ FRED Div
211 Mission Road
Kodiak AK 99615

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 292-23

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration Manipulation & Enhancement

✓ Lead Agency

ADF & G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

297-23

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments: See support letter Kodiak Island Borough #92061527?

* Restoration Framework, 1992, pp 43-44.

EXXON V. EZ OIL SPILL TRUSTEE COUN 29725

Document ID Number
920615297
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☐ C-RFWG
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☐ E-MISC.

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Pink Creek Pink Salmon Restoration**

Justification: (Link to Injured Resource or Service) Pink Creek drains into Afognak Bay which was oiled in 1989 due to the Exxon Valdez oil spill. This system was evaluated through Restoration Project 105.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach) Pink Creek (252-342) is located on Afognak Island and drains into Afognak Bay. Afognak Bay was directly impacted by oil in 1989. Restoration Study 105 surveyed this system in 1992 to determine fishpass feasibility. A falls blocks pink salmon from reaching a potential spawning area in this tributary to Afognak River. Survey results indicate that this barrier could be altered to allow pink salmon passage. Spawning area above the falls was determined to be of good to excellent quality and in sufficient quantity to support several thousand pink salmon.

This project would require steep pass sections resulting in approximately 15' rise to bypass the falls. A channel also would be cut leading into the upstream end of the steep pass. Water diversion structures such as gabions reinforced with steel pipe and rebar, would divert water into the channel and steep pass. Cable would be anchored into the rock substrate to secure the steep pass. This project would be evaluated by stream surveys during the peak pink salmon spawning period.

Estimated Duration of Project: Two (2) years

Estimated Cost per Year: $11,000

Other Comments:

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Steve Honnold
AK Dept of Fish & Game/ FRED Div
211 Mission Road
Kodiak AK 99615

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