11.09.13

11.9.13

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

AGENDA
EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL MEETING
DECEMBER 15, 1998 @ 8 A.M.
645 G STREET, ANCHORAGE

12/8/98
1:04 pm

DRAFT

Trustee Council Members:

BRUCE BOTELHO/CRAIG TILLERY
Attorney General/Trustee
State of Alaska/Representative

MICHELE BROWN
Commissioner
Alaska Department of Environmental Conservation

BOB ANDERSON
Trustee Representative
U.S. Department of the Interior

JAMES A. WOLFE
Trustee Representative
U.S. Department of Agriculture
Forest Service

STEVE PENNOYER
Director, Alaska Region
National Marine Fisheries Service

FRANK RUE
Commissioner
Alaska Department of Fish & Game

Teleconferenced in Juneau, Anchorage & throughout the spill area
State Chair

1. Call to Order 8 a.m.
   - Approval of Agenda
   - Approval of November 30, 1996 meeting notes

2. Public Comment Period 8:15 a.m.

3. Deferred Projects - FY99 Work Plan*

4. Alaska SeaLife Center Bench Fees*

5. Small Parcels*
   Kodiak Tax Parcels, Three 10-acre parcels
   KEN 1086 (Stariski Creek) Request for Parcel Meriting Special Consideration
   KEN 1084 (Morris) Request for Parcel Meriting Special Consideration

* indicates tentative action items

Adjourn - 10 a.m.

raw

Exxon Valdez Oil Spill Trustee Council

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TRUSTEE COUNCIL MEETING ACTIONS

November 30, 1998 @ 9:30 a.m.

By Molly McCammon
Executive Director

DRAFT

Trustee Council Members Present:

* Jim Wolfe, USFS	Frank Rue, ADF&G
Deborah Williams, USDOI	Michele Brown, ADEC
• Bruce Wright, NMFS	•Craig Tillery, ADOL

* Chair
In Anchorage: Jim Wolfe, Deborah Williams, Bruce Wright, & Craig Tillery
In Juneau: Frank Rue & Michele Brown

- Alternates:
  Bruce Wright served as an alternate for Steve Pennoyer for the entire meeting.
  Rob Bosworth served as an alternate for Frank Rue until 10:30 a.m.
  Craig Tillery served as an alternate for Bruce Botelho for the entire meeting.

Meeting convened at 9:37 a.m.

1. Approval of the Agenda

APPROVED MOTION: Approved the Agenda. Motion by Williams, second by Tillery.

2. Approval of the Meeting Minutes

APPROVED MOTION: Approved September 29, October 15 and November 10, 1998 Trustee Council meeting notes. Motion by Williams, second by Tillery.

Public comments received from seventeen individuals from Anchorage, Homer, Cordova, and Fairbanks.

3. Executive Session

APPROVED MOTION: Adjourned into executive session to discuss the archaeology proposals, the Alaska SeaLife Center operations and habitat protection. Motion by Williams, second by Wright.

Off Record 12:15 p.m.
On Record 3:08 p.m.

DRAFT

4. Restoration Reserve

The Council held a work session on this topic from 3 to 5 p.m. No action was taken.

5. Eyak Amendment

APPROVED MOTION: Authorized minor boundary adjustments to the July 2, 1997 resolution as described in the attached resolution. Motion by Williams, second by Wright.

6. Affirmation of Council Actions

APPROVED MOTION: Reaffirmed approved action items from the October 15 and November 10, 1998 Trustee Council meeting notes. Motion by Tillery, second by Williams.

Meeting adjourned at 5:10.

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RESOLUTION OF THE *EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL

We, the undersigned, duly authorized members of the *Exxon Valdez* Oil Spill Trustee Council ("Council"), find as follows:

1. The Eyak Corporation ("Eyak"), owns the surface estate of, or is entitled to receive title to, certain lands or interests in lands located within the Chugach National Forest in Prince William Sound, and is willing to sell certain interests in such lands. These lands were selected and, in part, have been conveyed to Eyak pursuant to the Alaska Native Claims Settlement Act ("ANCSA").

2. By resolutions of July 2, 1997 and August 13, 1998, the Council authorized funding for an offer to purchase approximately 55,357 acres of fee simple surface estate interests, approximately 6,667 acres of conservation easement interests, and approximately 13,400 acres of timber conservation easement interests in lands then presumed to be owned by Eyak. The Council authorized the total purchase price of $45 million subject to Eyak's ability to convey satisfactory title to these land interests.

3. The Bureau of Land Management has determined that Eyak will not receive title to certain land interests pursuant to ANCSA, which interests were included in the Council's offer to purchase. These interests are located near Olsen Bay and Canoe Passage and constitute approximately 3,152 fewer acres of surface fee than anticipated to be purchased by the Council.

4. The United States, by and through the Forest Service, and Eyak have proposed to enter into a land exchange to ensure that a substantial portion of the land interests expected by the Council to be received are still obtained. This exchange would reduce the surface fee interests to be acquired from Eyak in Olsen Bay by

approximately 923 acres. These acres will therefore remain in their current status as part of the Chugach National Forest.

5. Pursuant to the proposed land exchange, the United States will convey to Eyak the remaining 793 acres of surface fee interests in Olsen Bay and approximately 1,436 acres in Canoe Passage that Eyak initially anticipated it would receive pursuant to ANCSA. Eyak will convey to the United States the surface estate, subject to certain restrictive covenants, to 640 acres at Sheep Bay and its ANCSA selection rights to approximately 3,153 acres near Miles Lake. The Forest Service has determined that such an exchange is approximately of equal value.

6. The Council's resolutions required the execution of a purchase agreement and written notice from the United States and the State of Alaska that the terms and conditions established by the Council and contained in the purchase agreement have been satisfied prior to the withdrawal of funds from the Federal District Court Registry account. Such a condition, however, will not allow at least a partial closing with Eyak to occur in 1998.

THEREFORE we resolve the following:

1) to assent to the proposed changes in the Eyak transaction, as described above, including the reduction of approximately 923 acres of interests from the acreage originally expected by the Council to be acquired in Olsen Bay;

2) to amend the July 2, 1997 and August 13, 1998 resolutions to allow funds to be withdrawn from the Federal District Court Registry account prior to the execution of the purchase agreement so long as the funds are not expended until a purchase agreement in accordance with the terms and conditions of the Council's resolutions is

executed and is certified as such by the State of Alaska, the United States Department of Agriculture, and the Executive Director;

3) to authorize minor adjustments to the interests described in the July 2, 1997 resolution, such as the location of gravel pits, access at Power Creek, and the location of the Eyak spirit camp, subject to the approval of the Alaska Department of Law, the Office of General Counsel for the United States Department of Agriculture, and the Executive Director.

Dated this 30th day of November, 1998, at Anchorage and Juneau, Alaska.

JAMES A. WOLFE
Trustee Representative
USDA Forest Service

for BRUCE M. BOTELHO
Attorney General
State of Alaska

DEBORAH L. WILLIAMS
Special Assistant to the
Secretary for Alaska
Department of the Interior

STEVEN PENNOYER
Director, Alaska Region
National Marine
Fisheries Service

FRANK RUE
Commissioner
Alaska Department of
Fish and Game

MICHELE BROWN
Commissioner
Alaska Department of
Environmental Conservation

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

MEMORANDUM

TO: Trustee Council

FROM: Molly McCammon
Executive Director

RE: FY 99 Deferred Projects: Executive Director's Recommendation

DATE: December 9, 1998

Please find attached the following materials on the FY 99 deferred projects:

Numbers Spreadsheet
This spreadsheet contains, in summary form, my recommendation on all FY 99 work plan projects that were deferred at the August Trustee Council meeting. The spreadsheet is arranged by "resource cluster" (pink salmon, subsistence, etc.).

Total Funded in August/Sept.	$10,272,200
Recommended Funding for Defers	853,900
	$11,126,100
Funding target for FY 99	*$10-12 million*

The final page of the spreadsheet contains my recommendation on the Port Graham Hatchery (Project 99405; $781,300), which would be funded outside of the regular FY 99 work plan of research, monitoring, and general restoration projects.

Text Spreadsheet
This spreadsheet contains the complete text of the Chief Scientist's recommendation and my recommendation for each project that was deferred at your August meeting, as well as an abstract of each project. The spreadsheet is arranged numerically.

History of Project Costs
This spreadsheet contains the amount of funds approved in previous years for each deferred project now recommended for funding in FY 99. The spreadsheet is arranged numerically.

EXECUTIVE DIRECTOR'S RECOMMENDATION -- DEFERRED PROJECTS / FY 99 WORK PLAN

Proj. No.	Title	Lead Agency	Proposer	New or Cont'd	Funded in August	Deferred to Dec.		Executive Director's Recommendation Dec. FY99	FY00	FY01	FY02	Sum FY99-02
Pink Salmon					$44.4	$0.0		$24.5	$0.0	$0.0	$0.0	$68.9
99329	Synthesis of Toxicological Impacts	NOAA	S. Rice/NOAA	Cont'd	$44.4	$0.0	**Fund**	$24.5	$0.0	$0.0	$0.0	$68.9
SEA and Related Projects					$0.0	$125.0		$151.8	$143.6	$114.6	$0.0	$410.0
99361-BAA	Graphical Techniques for Synthesis/Communication	NOAA	J. Allen/PWSSC, T. Cooney/UAF	New	$0.0	$0.0	**Fund**	$26.8	$0.0	$0.0	$0.0	$26.8
99393-BAA	Food Webs: Structure and Change	NOAA	T. Kline/PWSSC	New	$0.0	$125.0	**Fund**	$125.0	$143.6	$114.6	$0.0	$383.2
Nearshore Ecosystem					$0.0	$596.4		$252.6	$82.5	$0.0	$0.0	$335.1
99289-BAA	Status of Black Oystercatchers	NOAA	S. Murphy/ABR, Inc.	Cont'd	$0.0	$232.6	**Do not fund**	$0.0	$0.0	$0.0	$0.0	$0.0
99379	Assessment of Risk to Residual Oil Using P450	ADFG	S. Jewett/UAF	New	$0.0	$121.3	**Fund**	$115.5	$28.3	$0.0	$0.0	$143.8
99432	Effects of Oil on High Cockscomb	ADFG	A.J. Paul/UAF	New	$0.0	$69.3	**Withdrawn**	$0.0	$0.0	$0.0	$0.0	$0.0
99459	Residual Oiling of Armored Beaches/GOA	DOI	G. Irvine/USGS-BRD, D. Mann/UAF, J. Short/NOAA	New	$0.0	$124.9	**Fund**	$124.9	$40.0	$0.0	$0.0	$164.9
99466	Barrow's Goldeneye Recovery Status	DOI	D. Esler/USGS-BRD	New	$0.0	$12.2	**Fund**	$12.2	$14.2	$0.0	$0.0	$26.4
99480	Black Oystercatcher Abundance and Reproduction	DOI	B. Andres/USFWS	New	$0.0	$36.1	**Do not fund**	$0.0	$0.0	$0.0	$0.0	$0.0
Seabird/Forage Fish and Related Projects					$0.0	$93.4		$88.8	$1.0	$0.0	$0.0	$89.8
99381	Status of Seabird Colonies in Northeastern PWS	USFS	M. Bishop/USFS	New	$0.0	$13.0	**Fund contingent**	$13.0	$1.0	$0.0	$0.0	$14.0
99434	East Amatuli Island Video Link	DOI	M. O'Meara/Pratt Museum	New	$0.0	$80.4	**Fund**	$75.8	$0.0	$0.0	$0.0	$75.8
Subsistence					$108.1	$404.8		$317.4	$113.3	$95.0	$33.0	$666.8
99052B	Traditional Knowledge	ADFG	P. Brown- Schwalenberg/CRRC, H. Huntington	Cont'd	$24.7	$21.4	**Fund**	$14.2				$38.9
99131	Clam Restoration	ADFG	P. Brown- Schwalenberg/ CRRC	Cont'd	$83.4	$202.0	**Fund**	$222.8	$0.0	$0.0	$0.0	$306.2
99263	Port Graham Salmon Stream Enhancement	ADFG	W. Meganack, Jr./Port Graham Corporation	Cont'd	$0.0	$42.1	**Fund**	$42.1	$23.5	$0.0	$0.0	$65.6
99401	Spot Shrimp Population	NOAA	C. Hughey/ Valdez Native Tribe, C. O'Clair/ NOAA	New	$0.0	$70.1	**Fund**	$38.3	$89.8	$95.0	$33.0	$256.1
99444	Community-Based Harbor Seal Research	ADFG	M. Riedel/Alaska Native Harbor Seal Commission, B. Kelly/UAF	New	$0.0	$69.2	**Do not fund**	$0.0	$0.0	$0.0	$0.0	$0.0

EXECUTIVE DIRECTOR'S RECOMMENDATION -- DEFERRED PROJECTS / FY 99 WORK PLAN

Proj. No.	Title	Lead Agency	Proposer	New or Cont'd	Funded in August	Deferred to Dec.	Executive Director's Recommendation	Dec. FY99	FY00	FY01	FY02	Sum FY99-02
Ecosystem Synthesis					$0.0	$244.3		$0.0	$0.0	$0.0	$0.0	$0.0
99360-BAA	Guidance for Future EVOS Activities	NOAA	C. Elfring/Polar Research Board, NRC	New	$0.0	$194.4	**Do not fund**	$0.0	$0.0	$0.0	$0.0	$0.0
99455	Investigation of Data System for Long-Term Monitoring	ADNR	C. Falkenberg/ECOlogic Corp.	New	$0.0	$49.9	**Do not fund**	$0.0	$0.0	$0.0	$0.0	$0.0
Administration, Science Management, and Public Info.					$152.0	$0.0		$18.8	$0.0	$0.0	$0.0	$170.8
99470(am)	10 Year Symposium (amendment)	ALL	Restoration Office, USFS	New	$152.0	$0.0	**Fund**	$18.8	$0.0	$0.0	$0.0	$170.8
				Total:				$853.9	$340.4	$209.6	$33.0	$1741.4

EXECUTIVE DIRECTOR'S RECOMMENDATION -- DEFERRED PROJECTS / OUTSIDE FY 99 WORK P

Proj. No.	Title	Lead Agency	Proposer	New or Cont'd	Funded in August	Deferred to Dec.	Executiv rector's Recommendation	Dec. FY99	FY00	FY01	FY02	Sum FY99-02
Subsistence					$0.0	$777.5		$781.3	$0.0	$0.0	$0.0	$0.0
99405	Port Graham Hatchery Reconstruction	ADFG	E. McMullen/Port Graham Village Council	New	$0.0	$777.5	**Fund contingent**	$781.3	$0.0	$0.0	$0.0	$0.0
				Total:				$781.3	$0.0	$0.0	$0.0	$0.0

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99052B	Traditional Ecological Knowledge	P. Brown- Schwalenberg/CRRC, H. Huntington	ADFG	Cont'd 3rd yr.	$46.1	$24.7	$21.4	**$14.2**				$38.9

Project Abstract

This project will fund a TEK (Traditional Ecological Knowledge) specialist to (1) provide technical assistance to Project 99320T-Supp/Herring TEK, (2) provide technical training to community members to build local capacity for research and management involving TEK, (3) organize and facilitate synthesis workshops between principal investigators and community experts, and (4) serve as a contact point for spill area communities, the community facilitators and Spill Area-Wide Coordinator hired under Project /052A, and principal investigators on issues related to TEK.

Chief Scientist's Recommendation

The goal of this project, which is the exchange of knowledge from traditional and local sources and scientific studies, is worthy. However, the project has now been funded for three years and has achieved few concrete results. When this project was funded in FY 98, it was with the understanding that funding in FY 99 would be contingent upon a favorable review of FY 98 results. My review of the annual report for FY 97 and preliminary information on the project in FY 98 indicates that this is still a weak project in terms of producing concrete results. However, it is clear this effort enjoys substantial support in the communities (e.g., the seaduck synthesis workshop in Tatitlek). I can support only limited funding in FY 99, including for several more synthesis workshops.

Executive Director's Recommendation

Fund partial request for technical training component, which was deferred pending further discussions between the proposer and the resource management agencies on the goals of the training. These discussions have taken place. In FY 99, one training workshop will be held. At this workshop, the purpose and methods of TEK research will be introduced to give selected community members an understanding of how and why TEK research is conducted. A proposal to hold additional training sessions that focus on specfic research ideas will likely be submitted in FY 2000. Funds approved in August are for continuation of technical assistance to principal investigators (primarily 99320T-Supp in FY 99) and informational workshops between principal investigators and community experts. This project is designed to explore and facilitate the use of traditional knowledge in the restoration of injured resources, which is an important goal of the Trustee Council. Funding beyond FY 99 will be considered following a review of the FY 99 effort.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99131	Chugach Native Region Clam Restoration	P. Brown- Schwalenberg/ CRRC	ADFG	Cont'd 5th yr. 5 yr. project	$285.4	$83.4	$202.0	**$222.8**	$0.0	$0.0	$0.0	$306.2

Project Abstract

Cost effective procedures for establishing easily accessible subsistence clam populations near Native villages in the oil spill region will be established. In FY 99 the scope of work will be confined to developing effective, standardized techniques for producing littleneck clam seed at the Qutekcak Hatchery and analyzing growth and mortality of this seed placed on the beaches in FY 96, FY 97 and FY 98. Total seeded area during the project will not exceed five hectares. Follow-up research on success of seeding will be conducted. Growout development work will be confined to areas near the Native villages of Tatitlek, Nanwalek and Port Graham. Nursery and growout work will be emphasized in FY 99.

Chief Scientist's Recommendation

This project has achieved tremendous success after transferring operations to the new clam hatchery and implementing new protocols for spawning clams. Large numbers of seed are being produced in the hatchery and emphasis is now shifting toward improving the protocols for the growout of seed in the outside pond and for juveniles in the field. The funding request includes funds to install several large outdoor tanks to replace the rearing ponds, which is needed to assure good spring and summer growth. An experimental design must be submitted for review by March 12, 1999 that shows how various factors affecting beach growout success will be evaluated. Fund as now proposed.

Executive Director's Recommendation

Fund balance of request, which was deferred pending a site visit and technical review by the Chief Scientist. FY 99 is the final year of Trustee Council contribution to this project, which aims to enhance local clam populations as replacements for subsistence resources injured by the oil spill. In FY 99, the emphasis will be on the development of standardized techniques for the hatchery production of littleneck clams and on analyzing growth and mortality of the seed planted on beaches in prior years. Additional clam seed will be planted on project beaches (Port Graham, Nanwalek, Tatitlek) in FY 99 in order to maintain the development schedule for enhancing local populations.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99263	Assessment, Protection and Enhancement of Salmon Streams in Lower Cook Inlet	W. Meganack, Jr./Port Graham Corporation	ADFG	Cont'd 3rd yr. 4 yr. project	$42.1	$0.0	$42.1	**$42.1**	$23.5	$0.0	$0.0	$65.6

Project Abstract

This project will replace lost subsistence services by constructing enhancement projects on two of the major salmon streams in the lower Cook Inlet spill area. Port Graham Corporation, with advice from an Alaska Department of Fish and Game fisheries specialist, will supervise the project and coordinate with a professional fisheries scientist and resource consultants. Local subsistence users will be employed as technical assistants during the field survey and during construction of the habitat improvement structures. In FY 98, two projects are being implemented: construction of a fish pass on the Port Graham River and a rearing pond on Windy Creek Left. In FY 99, the success of these two projects will be monitored and vegetation will be planted around the rearing ponds.

Chief Scientist's Recommendation

Design and construction objectives were met in FY 98. The methods proposed to measure success are appropriate for the short-term commitment of the Trustee Council. A two-year period of Council support, FY 99-00 only, is appropriate. Any longer-term effort at monitoring progress, funded from other sources, should include a component to track development of riparian vegetation. Fund.

Executive Director's Recommendation

Fund, including revised monitoring scheme, now that FY 98 construction of stream improvements has been satisfactorily completed. Funding in FY 99 includes new objective to plant vegetation around the rearing ponds on Windy Creek Left. The goal of this project is to protect and enhance salmon streams important to the restoration of subsistence in the Port Graham area.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99289-BAA	Status of Black Oystercatchers in Prince William Sound	S. Murphy/ABR, Inc.	NOAA	Cont'd 2nd yr.	$232.6	$0.0	$232.6	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

This study will assess the status of the breeding population of black oystercatchers in Prince William Sound nine (FY 98) and ten (FY 99) years after the oil spill. Year 1 studies for this project are scheduled for summer 1998, but preliminary results from that initial monitoring effort will not be available until later in FY 98. Because the extent and focus of the Year 2 effort are contingent upon the findings of Year 1, this proposal primarily represents an estimate of the level of effort that will be required to more thoroughly examine persistent impacts to the breeding population of oystercatchers in Prince William Sound.

Chief Scientist's Recommendation

Funding additional work on black oystercatchers in FY 99 was contingent on evaluating a preliminary report on the status of this species from field studies in FY 98 (Project 98289). I have reviewed the preliminary report, which generally indicates that spill-related effects found previous to 1991 are not now evident, there is no avoidance of oiled areas, and the population and nesting effort of oystercatchers is either stable or increasing in the spill area. Pending completion and review of the final report, it does not appear necessary to fund a second year of studies on this shorebird. Do not fund.

Executive Director's Recommendation

Do not fund. This project was deferred pending a review of FY 98 results (Project 98289), which the Chief Scientist has now completed. The preliminary report indicates that spill-related effects are not now evident and that population and nesting effort is either stable or increasing in the spill area. Therefore, it does not appear necessary to fund additional studies on the black oystercatcher at this time.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99329	Synthesis of the Toxicological Impacts on Pink Salmon	S. Rice/NOAA	NOAA	Cont'd 2nd yr. 2 yr. project	$44.4	$44.4	$0.0	**$24.5**	$0.0	$0.0	$0.0	$68.9

Project Abstract

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

Chief Scientist's Recommendation

This project will provide a valuable contribution to the efforts to synthesize Natural Resource Damage Assessment work. Since this proposal was first considered last spring, additional funds have been requested to cover unanticipated costs associated with analysis of original data from Exxon-sponsored studies and with travel to meetings in spill-area communities. I support this additional funding.

Executive Director's Recommendation

Fund additional amount ($24,500) for this project, which in FY 99 will complete the synthesis of five separate studies funded by the Trustee Council (FS4B, /076, /191A, /191B, /194) to examine the possible long-term damage to pink salmon of the toxic effects of crude oil; the synthesis will consider additional studies sponsored by Exxon Corporation. Products will be a monograph for publication in a peer reviewed journal and a presentation at the 10 Years After symposium. The additional funds will cover unanticipated costs associated with analysis of original data from Exxon-sponsored studies, travel to meetings in spill-area communities to present study results, and page charges not requested in the original proposal.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99360-BAA	The *Exxon Valdez* Oil Spill: Guidance for Future Research Activities	C. Elfring/Polar Research Board, NRC	NOAA	New 1st yr. 3 yr. project	$203.1	$0.0	$194.4	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

The National Research Council's Polar Research Board and Board on Environmental Science and Toxicology will review the scope, content, and structure of the draft science plan the Trustee Council is preparing to guide long-term research and monitoring in the northern Gulf of Alaska. The committee formed to accomplish this task will become familiar with the overall program of damage assessment and restoration research and monitoring activities sponsored by the Trustee Council to provide context for reviewing the draft plan. The committee will prepare a final report with conclusions and recommendations intended to give guidance on the nature and scope of future research and monitoring activities in the northern Gulf of Alaska.

Chief Scientist's Recommendation

A review of the potential EVOS long-term research and monitoring program by the National Research Council is an important opportunity to further establish scientific credibility. This proposal was revised in response to earlier peer review comments and is improved. However, I think that this effort is premature in terms of the development of a long-term research and monitoring program. Do not fund, but consider again in FY 2000.

Executive Director's Recommendation

Do not fund in FY 99. This project, which would provide independent scientific review of the potential EVOS long term research and monitoring program, may be reconsidered in FY 2000, depending on the Trustee Council's decision on the Restoration Reserve. In anticipation of resubmitting their proposal in FY 2000, one or more members of the National Research Council's Polar Research Board and Board on Environmental Science and Toxicology will likely attend the 10 Years After symposium being sponsored by the Trustee Council in March 1999.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99361-BAA	Dynamic Graphical Techniques for Ecosystem Synthesis, Communication and Product Delivery	J. Allen/PWSSC, T. Cooney/UAF	NOAA	New 1st yr. 1 yr. project	$26.8	$0.0	$0.0	**$26.8**	$0.0	$0.0	$0.0	$26.8

Project Abstract

As the tenth anniversary of the oil spill approaches and restoration research efforts draw to a close, there is an increasing need for information synthesis, translation, and communication. Transfer of ecosystem-level research results to the public, resource managers, policy makers and the wider scientific community remains a critical challenge. This project will augment existing synthesis efforts by focusing on graphical approaches, including advanced computer imaging and multimedia presentation technology. The utility of these technologies will be demonstrated by means of a high impact, dynamic, graphical presentation of the synthesized results of SEA (Project /320). It is anticipated that techniques developed and refined during this work will have direct application to larger-scale synthesis, communication, and technology transfer tasks facing the Trustee Council in the near future.

Chief Scientist's Recommendation

In general, the application of computer presentation technology has the potential to enhance communication of important synthesis objectives and link multiple elements of the restoration program. The principal investigators are very strong, and the presentation of SEA (Project /320) results at the 1998 Restoration Workshop was an example of how sophisticated scientific information can be conveyed to the public in a compelling fashion. This work needs to be updated and enhanced for presentation at the 10 Years After symposium and recorded in video format for extended use. Fund.

Executive Director's Recommendation

Fund revised proposal, which is scaled down significantly from the original proposal. This project will develop a presentation on SEA (Project /320), one of the Trustee Council's primary ecosystem projects which is closing out in FY 99, for the 10 Years After symposium. In an effort to facilitate broader dissemination of the results of the SEA project, the presentation will be aimed at lay audiences and will include a video version. Following the symposium, 100 copies of a CD-ROM version of the presentation, as well as the video version, will be provided to the Restoration Office for dissemination to the public. The principal investigator should provide the Restoration Office an opportunity to review the content of the presentation at an early stage in its development.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99379	Assessment of Risk Caused by Residual Oil in Prince William Sound Using P450 Activity in Fishes	S. Jewett/UAF	ADFG	New 1st yr. 2 yr. project	$121.3	$0.0	$121.3	**$115.5**	$28.3	$0.0	$0.0	$143.8

Project Abstract

This project will determine the spatial extent of potential exposure to hydrocarbons in western Prince William Sound by examining P450 activity in two coastal fishes, masked greenling and crescent gunnel. These fishes live and feed in the nearshore zone, and provide an index of exposure for fishes and other vertebrates. In addition, the project will examine the relationship between P450 levels in these fishes, hydrocarbon concentrations in sediments, and hydrocarbon metabolites in these fishes to help determine if exposure is from residual oil from the *Exxon Valdez* spill.

Chief Scientist's Recommendation

This project will provide more information on the induction of oil-sensitive enzymes in nearshore fishes in the oiled areas of Prince William Sound. Preliminary studies in 1997 indicate induction in the kelp greenling eight years after the spill, and this proposal will provide similar information on one other species in a wider area in FY 99. Sampling of nearshore fishes will be linked to monitoring of oiled mussel beds (Project 99090) and will include analysis of hydrocarbons and their metabolites in bile. Fund.

Executive Director's Recommendation

Fund. This project was deferred to ensure coordination with the sampling of oiled mussel beds being undertaken by the National Oceanic and Atmospheric Administration (Project 99090). The revised Detailed Project Description achieves the desired coordination., This project will use two nearshore fishes -- masked greenling and crescent gunnel -- as indicators of pathways of oil exposure.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99381	Status of Seabird Colonies in Northeastern Prince William Sound	M. Bishop/USFS	USFS	New 1st yr. 2 yr. project	$13.0	$0.0	$13.0	**$13.0**	$1.0	$0.0	$0.0	$14.0

Project Abstract

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

Chief Scientist's Recommendation

This inexpensive project will collect information about the size and composition of several small seabird colonies on lands in western Prince William Sound currently owned by Eyak Corporation that are being transferred into public ownership. This information will be useful as the agencies develop management plans for these lands. Fund.

Executive Director's Recommendation

Fund contingent on submittal of overdue report (95320Q). This project was deferred pending further review of funding priorities. Because the project is inexpensive and the information will benefit development of appropriate management plans, I now recommend funding in FY 99. The project will collect information on several small seabird colonies located on lands in eastern Prince William Sound that are being transferred into public ownership.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99393-BAA	Prince William Sound Food Webs: Structure and Change	T. Kline/PWSSC	NOAA	New 1st yr. 3 yr. project	$125.0	$0.0	$125.0	**$125.0**	$143.6	$114.6	$0.0	$383.2

Project Abstract

Recent research has shown that the oceanographic conditions connecting the northern Gulf of Alaska with Prince William Sound may affect recruitment and nutritional processes in fishes. Accordingly, food webs are subject to changes in carbon flow occurring between the Gulf of Alaska and Prince William Sound. This project seeks to (1) conduct retrospective analysis of Gulf of Alaska production shifts since the oil spill and (2) address Ecopath model validation data gaps. These analyses will enable a better understanding of the ecological role of regime shift processes conjectured to be impeding the natural restoration of populations in Prince William Sound affected by the oil spill.

Chief Scientist's Recommendation

This project as originally proposed had a variety of objectives involving application of carbon and nitrogen stable isotope ratios to ecological questions. In response to peer review comments, the revised Detailed Project Description focuses on two applications: (1) the possibility that there may be an isotopic record back to 1989 in bivalve shells from the Gulf of Alaska and (2) confirmation of trophic position of a variety of marine organisms for the purposes of refining the Ecopath model (Project \330). Fund revised proposal.

Executive Director's Recommendation

Fund. This project was deferred pending further review of funding priorities. The project will use carbon and nitrogen stable isotope ratios to confirm the relative trophic status of species within the Prince William Sound ecosystem. Because this information will be useful in validating the food web model being developed under Project /330, I now recommend funding in FY 99.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99401	Assessment of Spot Shrimp Abundance in Prince William Sound	C. Hughey/ Valdez Native Tribe, C. O'Clair/ NOAA	NOAA	New 1st yr. 4 yr. project	$70.1	$0.0	$70.1	**$38.3**	$89.8	$95.0	$33.0	$256.1

Project Abstract

This project will estimate the abundance of spot shrimp and determine the structure of the spot shrimp population in western Prince William Sound. The project will augment current Alaska Department of Fish and Game (ADFG) surveys to determine whether the spot shrimp population is recovering from depletion. To maintain consistency with the timing of ADFG surveys, the first full sampling cruise will take place in October 1999. In year one, western Prince William Sound will be surveyed for study sites. In years two and three, spot shrimp relative abundance, population structure and reproductive potential will be estimated at the study sites. An added objective in year three will be an estimate of recruitment potential achieved by expanding the depth range of the sampling into shallow water to assess the relative abundance of juveniles. Year four will be closeout, production of manuscripts, and providing input into the development of a shrimp management plan with ADFG.

Chief Scientist's Recommendation

The revised proposal is a well-planned effort to better identify the potential for recovery of the spot shrimp population in Prince William Sound in cooperation with the Valdez Native Tribe. The proposal will expand the geographic scope of the Alaska Department of Fish and Game surveys in Prince William Sound. Fund.

Executive Director's Recommendation

Fund. This project was deferred pending submittal and satisfactory peer review of a more complete Detailed Project Description; the Chief Scientist has reviewed the revised proposal and recommends that it be funded. Concerns over the declining number of shrimp have been raised repeatedly by subsistence users. Since the oil spill, shrimp harvest seasons have diminished to the point of closure. This project will study the abundance of spot shrimp in Prince William Sound to determine whether the population can sustain seasonal openings for subsistence, personal use, and commercial fishing. Shrimp are not on the injured species list. However, the Trustee Council's Restoration Plan allows restoration actions to address resources not on the list if the action will benefit an injured resource or service; this project will benefit the services of subsistence and commercial fishing.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99405	Port Graham Salmon Hatchery Reconstruction	E. McMullen/Port Graham Village Council	ADFG	New 1st yr. 1 yr. project	$777.5	$0.0	$777.5	**$781.3**	$0.0	$0.0	$0.0	$781.3

Project Abstract

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

Chief Scientist's Recommendation

I have been informed that all necessary permits have been obtained from the Alaska Department of Fish and Game and other agencies and that the Regional Planning Team (RPT) has given its approval to the hatchery. The permits and the RPT process are designed to ensure proper fishery management, including the use of the local wild stock to avoid introduction of fish with exotic genetic makeup or new disease. The results of the planning and permitting process were not included in the Detailed Project Description (DPD) so were not part of my review, but the fisheries management plan approved by the RPT should become part of the DPD. It would provide a record of the specific measures that are in place to guarantee the long-term health of the wild runs of salmon from which the hatchery stock is to be taken and that measures necessary to avoid problems that have negatively affected wild stocks in other areas where hatcheries exist will be avoided. The Trustee Council should expect to be provided assurances by the fishery management plan of the planned existence of the following two measures: (1) a stock identification program that differentiates wild and hatchery stock to avoid overharvest of wild stocks at all times during harvesting of the returning hatchery fish, and (2) timely counting of wild stock escapements to the Port Graham and English Bay rivers to ensure that wild runs will not decline in the future due to overharvest. Fund contingent on the above issues being satisfactorily addressed.

Executive Director's Recommendation

Fund contingent on (a) satisfactory response to the Chief Scientist's concerns and (b) adequate funds from other sources being in place. This project will contribute $725,000 to the $2.2 million reconstruction of the Port Graham hatchery, which was destroyed by fire in January 1998. Consistent with Trustee Council policy, funds for Project 99405 will be released in two phases: Phase 1 will consist of NEPA compliance activities and engineering/design. Phase II, to begin upon satisfactory completion of Phase 1, will consist of construction. The Trustee Council has supported the hatchery's programs for several years in an effort to rehabilitate and enhance the pink, coho, and sockeye salmon runs in the Port Graham and Nanwalek areas. The hatchery has provided additional fish for subsistence and commercial use, as well as providing an opportunity to reduce harvest pressure on the wild stocks.
[NOTE: If funded, funds for this project will be outside of the regular FY 99 work plan of research, monitoring, and general restoration projects.]

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99432	Proximate and Ultimate Effects of Crude Oil on the Intertidal Fish, High Cockscomb	A.J. Paul/UAF	ADFG	New 1st yr. 3 yr. project	$69.3	$0.0	$69.3	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

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

Chief Scientist's Recommendation

Project withdrawn by proposer.

Executive Director's Recommendation

Project withdrawn by proposer.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99434	East Amatuli Island Remote Video Link	M. O'Meara/Pratt Museum	DOI	New 1st yr. 1 yr. project	$75.2	$0.0	$80.4	**$75.8**	$0.0	$0.0	$0.0	$75.8

Project Abstract

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

Chief Scientist's Recommendation

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

Executive Director's Recommendation

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

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99444	Harbor Seal Population Studies: Community-Based Research	M. Riedel/Alaska Native Harbor Seal Commission, B. Kelly/UAF	ADFG	New 1st yr. 2 yr. project	$69.2	$0.0	$69.2	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

This project will combine the expertise of Alaska Native hunters and University of Alaska researchers to monitor population parameters of harbor seals in the spill area. The age and sex composition and the timing of pupping among harbor seals in the spill area will be monitored and contrasted with the same parameters in a population showing recovery. Fine-scale population structuring will be examined using micro-satellite DNA extracted from seal scat and tissues. Dispersal rates will be estimated from genetic fingerprints and "tag" returns using photographic identification of individual seals.

Chief Scientist's Recommendation

The revised proposal for this project focuses on identifying possible fine-scale population structure and movement within Prince William Sound harbor seal populations. Both the genetic and population demographic study components appear promising, but further review, coordination, and integration are necessary before I would be comfortable recommending funding.

Executive Director's Recommendation

Do not fund in FY 99; possibly reconsider in FY 2000. The revised proposal is much improved over the original. However, the Chief Scientist has identified several substantial issues that need to be resolved before the project can proceed. Postponing consideration of the project until FY 2000 will allow time for the Alaska Native Harbor Seal Commission, the Chief Scientist, the National Marine Fisheries Service, and the Alaska Department of Fish and Game to better coordinate and integrate their efforts to monitor harbor seal populations in the spill area.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99455	An Investigation of the Data System for the EVOS Long Term Monitoring Program	C. Falkenberg/ECOlogic Corp.	ADNR	New 1st yr. 1 yr. project	$49.9	$0.0	$49.9	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

This project will investigate the issues relating to the creation of the data delivery system needed by the potential EVOS long-term monitoring and research program. In addition to data collection, data delivery will prove to be a critical component of the success of the long-term monitoring and research program. Therefore, as that program is planned the data delivery issues need to be integrated into the process. This project will outline some of those issues and provide background research into existing systems that deliver similar data. A specific design for this data system will not be proposed; rather, the data system issues that need to be included in the planning process will be presented.

Chief Scientist's Recommendation

This proposal represents an extraordinarily valuable initial step for planning an effective long-term research and monitoring program. The project would also provide a cost-effective assessment of critical data system design issues, calling upon the principal investigator's experience with data systems operated by the National Science Foundation, National Oceanic and Atmospheric Administration, National Aeronautic and Space Administration, and others. The project report would need to be free of technical jargon to be effective, and must portray options to pursue and the consequences of these choices. However, I think that this effort is premature in terms of the development of a long-term research and monitoring program. Do not fund, but consider again in FY 2000.

Executive Director's Recommendation

Do not fund in FY 99. This project, which is designed to ensure that data collected through the potential EVOS long-term research and monitoring effort is used by the widest number of users and applications, may be reconsidered in FY 2000, depending on the Trustee Council's decision on the Restoration Reserve.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99459	Residual Oiling of Armored Beaches and Mussel Beds in the Gulf of Alaska	G. Irvine/USGS-BRD, D. Mann/UAF, J. Short/NOAA	DOI	New 1st yr. 2 yr. project	$124.9	$0.0	$124.9	**$124.9**	$40.0	$0.0	$0.0	$164.9

Project Abstract

For at least five years after the spill, oil mousse persisted on the exposed rocky shores of the Alaska and Kenai peninsulas in a remarkably unweathered state. This project will resample these boulder-armored beach sites that were last studied in 1994. In addition, several oiled mussel beds in the Gulf of Alaska that had relatively high levels of oiling in 1993 will be resampled, to compare residual oiling of these with oiled mussel beds in Prince William Sound. A mixture of qualitative and semi-quantitative approaches will be used.

Chief Scientist's Recommendation

The possible continued presence of oil on what many people consider one of the greatest wilderness coasts in the National Park System may represent continuing injury from the oil spill. The proposal has been revised to document continued oiling with mostly qualitative techniques. This work needs to be done within a year or two, and if sufficient funds are available, I recommend that it be carried out in FY 99.

Executive Director's Recommendation

Fund. This project was deferred pending further review of funding priorities; I now recommend funding in FY 99. This project will monitor the persistence of oil at sites previously monitored in FY 94 along the coasts of Kenai Fjords and Katmai national parks, which will provide important status information ten years after the spill. In the Kodiak region, the final round of shoreline monitoring took place in FY 95. In Prince William Sound, shoreline sites cleaned in FY 97 near the community of Chenega Bay were revisited in FY 98 (Project /291). It may be appropriate to conduct another, more comprehensive round of shoreline monitoring in Prince William Sound in two to three years.

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99466	Recovery Status of Barrow's Goldeneyes	D. Esler/USGS-BRD	DOI	New 1st yr. 2 yr. project	$12.2	$0.0	$12.2	**$12.2**	$14.2	$0.0	$0.0	$26.4

Project Abstract

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

Chief Scientist's Recommendation

Although Barrow's goldeneye is not formally considered to be an injured species, there was some initial mortality to this duck and evidence of possible injury lingering in 1998. The review proposed in this project will synthesize existing information, which, in combination with the results of ongoing studies such as the Nearshore Vertebrate Predator project (/025), should clarify the status of the Barrow's goldeneye with respect to prior and lingering injury. This modest project should provide a firm basis for a formal determination on listing this species as injured and for recommendations on restoration and research priorities, if appropriate. Fund.

Executive Director's Recommendation

Fund. This project was deferred pending reconsideration of the status of injury to the Barrow's goldeneye. Although the Barrow's goldeneye has not been added to the injured resources list, the Nearshore Vertebrate Predator project (/025) and the marine bird boat surveys (Project /159) have found evidence of new and ongoing injury to this species. This project will provide additional information necessary for making a determination on adding the species to the injured resources list.

EXECUTIVE DIRECTOR'S RECOMMENDATION: DEFERRED PROJECTS / FY 99 WORK PLAN

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99470(am)	10 Year Symposium and Related Events and Materials (amendment)	Restoration Office, USFS	ALL	New 1st yr. 1 yr. project		$152.0	$0.0	**$18.8**	$0.0	$0.0	$0.0	$170.8

Project Abstract

A coalition of spill-area resource groups has formed to promote education about the oil spill, restoration activities, and spill prevention/response. The Oil Pollution Prevention Education Program is a partnership between the Prince William Sound Regional Citizens' Advisory Council, the US Forest Service, Prince William Sound Science Center, and Chugachmiut. The Restoration Office and others have participated in the planning efforts of the group. This amendment will provide funding support for two activities of the group related to the 10th anniversary of the spill, an art and essay contest and an informational newspaper. The art and essay contest will be open to school children throughout the spill area. The newspaper will be distributed through school districts in the spill area and at the Alaska SeaLife Center as part of the EVOS exhibit. In addition, funds are included for distribution of the Trustee Council's 30-minute video, which focuses on specific research projects as well as the habitat protection program, to school districts statewide.

Chief Scientist's Recommendation

Proposal not reviewed.

Executive Director's Recommendation

Fund. This project will enhance the Trustee Council's efforts to commemorate the 10th anniversary of the spill by providing funds to conduct an art and essay contest among school children in the spill area, print an informational newspaper for distribution to school districts in the spill area and at the Alaska SeaLife Center, and reproduce and distribute the Council's video on its restoration efforts to school districts statewide. [NOTE: Funding for the symposium itself was approved by the Council in August (Project 99470, $152,000).]

Proj.No.	ProjectTitle	Proposer	Lead Agency	New or Cont'd	FY 99 Revised Request	Funded in August	Deferred to Dec.	RECOM-MENDATION	FY 00 Estimate	FY 01 Estimate	FY 02 Estimate	Total FY 99-02 Estimate
99480	Abundance and Reproductive Success of Black Oystercatchers in Prince William Sound	B. Andres/USFWS	DOI	New 1st yr. 1 yr. project	$36.1	$0.0	$36.1	**$0.0**	$0.0	$0.0	$0.0	$0.0

Project Abstract

The black oystercatcher was determined to be injured by the oil spill and the status of its recovery is unknown. This project will survey shorelines on Knight, Green, and Montague islands to determine breeding pair occupancy and productivity. This information will be compared with data gathered from 1991 to 1993 along the same shorelines. Additional information will be collected on predator densities and invertebrate prey densities to determine the influence of these factors on occupancy and productivity. Data collected in FY 99 will demonstrate recovery of black oystercatchers if (1) more pairs are occupying Knight Island in 1999 than in 1993, (2) the population on Green Island is increasing or stable, and (3) productivity is similar, when accounting for predation pressure and food availability, between Green and Knight islands.

Chief Scientist's Recommendation

Funding additional work on black oystercatchers in FY 99 was contingent on evaluating a preliminary report on the status of this species from field studies in 1998 (Project 98289). I have reviewed the preliminary report, which generally indicates that spill-related effects found previous to 1991 are not now evident, there is no avoidance of oiled areas, and the population and nesting effort of oystercatchers is either stable or increasing in the spill area. Pending completion and review of the final report, it does not appear necessary to fund a second year of studies on this shorebird. Do not fund.

Executive Director's Recommendation

Do not fund. This project was deferred pending a review of FY 98 results (Project 98289), which the Chief Scientist has now completed. The preliminary report indicates that spill-related effects are not now evident and that population and nesting effort is either stable or increasing in the spill area. Therefore, it does not appear necessary to fund additional studies on the black oystercatcher at this time.

History of Project Costs - Deferred Projects / FY 99 Work Plan

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	Subtotal FY92-99	FY00-02	Total FY92-02
052B / Traditional Knowledge	$0.0	$0.0	$0.0	$0.0	$0.0	$92.4	$61.3	**$38.9**	$192.6		$192.6
131 / Clam Restoration	$0.0	$0.0	$0.0	$223.6	$257.3	$365.0	$290.1	**$306.2**	$1,442.2	$0.0	$1,442.2
263 / Port Graham Salmon Stream Enhancement	$0.0	$0.0	$0.0	$0.0	$0.0	$58.0	$107.0	**$42.1**	$207.1	$23.5	$230.6
329 / Synthesis of Toxicological Impacts	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$25.6	**$68.9**	$94.5	$0.0	$94.5
361-BAA / Graphical Techniques for Synthesis / Communication	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$26.8**	$26.8	$0.0	$26.8
379 / Assessment of Risk to Residual Oil Using P450	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$115.5**	$115.5	$28.3	$143.8
381 / Status of Seabird Colonies in Northeastern Prince William Sound	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$13.0**	$13.0	$1.0	$14.0
393-BAA / Food Webs: Structure and Change	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$125.0**	$125.0	$258.2	$383.2
401 / Spot Shrimp Population	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$38.3**	$38.3	$217.8	$256.1
434 / East Amatuli Island Video Link	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$75.8**	$75.8	$0.0	$75.8

NOTES:

1. Costs are shown in thousands of dollars.
2. Figures for FY 92-97 are expenditures or obligations on restoration projects. Expenditures and obligations for FY 95-97 have been audited.
3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 are amounts authorized by the Trustee Council.
5. Figures for FY 99 include amounts authorized by the Trustee Council in August 1998 and recommendations on deferred projects.
6. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
7. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	**FY99**	Subtotal FY92-99	FY00-02	Total FY92-02
459 / Residual Oiling of Armored Beaches/GOA	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$124.9**	$124.9	$40.0	$164.9
466 / Barrow's Goldeneye Recovery Status	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$12.2**	$12.2	$14.2	$26.4
470 / 10 Year Symposium and Related Events	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$170.8**	$170.8	$0.0	$170.8
Total Cost :	$0.0	$0.0	$0.0	$223.6	$257.3	$515.4	$484.0	**$1,158.4**	$2,638.7	$583.0	$3,221.7

NOTES:

1. Costs are shown in thousands of dollars.
2. Figures for FY 92-97 are expenditures or obligations on restoration projects. Expenditures and obligations for FY 95-97 have been audited.
3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 are amounts authorized by the Trustee Council.
5. Figures for FY 99 include amounts authorized by the Trustee Council in August 1998 and recommendations on deferred projects.
6. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
7. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

MEMORANDUM

To: Trustee Council Date: December 7, 1998

Thru: Molly McCammon Subj: Amendment to 99470

From: Joe Hunt

This memo provides the background for a request to amend *99470 (10-Year Symposium and Related Events/Materials)* to fund an educational component for the 10th anniversary.

Oil Pollution Prevention Education Program

After two months of discussion involving several spill-area resource groups, a coalition has formed to promote education about the *Exxon Valdez* spill, restoration activities, and spill prevention/response. The Oil Pollution Prevention Education Program is a partnership between the Prince William Sound Regional Citizens' Advisory Council, the U.S. Forest Service, Prince William Sound Science Center, and Chugachmiut. The EVOS Restoration Office, Oil Spill Recovery Institute, Alaska SeaLife Center, Pratt Museum, Valdez Museum and others have participated in the planning efforts of this group.

OPPEP has submitted an education proposal to the Trustee Council and to OSRI to request funding for 1) 10th anniversary activities for spill region schools and 2) a long-term education program for school districts statewide. The proposal was submitted December 1, with Restoration Office encouragement so that we could consider requests concerning 10th anniversary education activities. OPPEP has been informed that any proposal to fund a long-term education program would have to go through the normal Trustee Council funding cycle.

Due to the late date, any 10th anniversary education project must be limited to what can reasonably be accomplished before the March 24, 1999 anniversary. Proposed activities include:

1) **Informational Newspaper**

Creation of a four-page newspaper to be distributed through the school districts within the spill region. This newspaper would answer key questions in very simple terms.

- Is there still oil on the beaches? If so, where?
- Are the fish and wildlife injured by the spill recovering?
- Was the EVOS event the largest spill ever?
- Could it happen again?
- If it happened again, would the response be improved?

The newspaper would also contain a broad resource list for teachers and others to obtain more information. The OPPEP proposal asks for $3,700 to create the newspaper and print 10,000 copies. Prince William Sound Science Center would provide $1,200 in in-kind staffing to organize this effort.

The newspaper would be available to any agency or group that would want to reprint it for distribution. The Restoration Office could reprint 30,000 copies for distribution with the 30-minute video (see video information below) and for distribution at the Alaska SeaLife Center as part of the EVOS exhibit. If this is done at the time of the original printing, it will cost about $3,000 or 10 cents each.

2) Art & Essay Contest

Organization of an Art & Essay Contest for school children in the spill region. This contest would be open to high school students who would have been four- to eight-years-old at the time of the spill. It would ask for impressions about how the spill impacted their families and communities. The art contest would be open to all grade levels.

The art and essay contest would be one way to get students to reflect on the 10th anniversary and all of the spill-related events of the previous 10 years. A series of prizes would be made available to the top finishers in each category.

The Art and Essay contest could benefit 10th anniversary activities in several ways.

- Submissions to the art contest could be exhibited at the symposium.
- The winner(s) of the essay contest could present the paper(s) at the symposium.
- A calendar could be created as an educational tool about the EVOS and spill prevention/response. This would be modeled after the Goose Calendar Contest conducted by the USFWS to promote conservation in western Alaska.
- Artwork and essays could be collected into an exhibit that would tour Alaska schools and libraries.
- The Anchorage Daily News has expressed an interest in printing essays and artwork in We Alaskans.

The OPPEP proposal asks for $9,700 for the Art & Essay Contest to cover the costs of:

Promotion	$700
Prizes	$2,000
Travel scholarships to attend symposium	$2,000
Calendar printing (2,500 @ $2)	$5,000

This contest would be managed by the U.S. Forest Service, which would staff time and graphic design for the calendar. The USFS in-kind contribution is estimated to be worth $11,400.

EVOS Video Distribution

In addition to the OPPEP proposal, the Trustee Council's 30-minute video should be disseminated to school districts statewide. This video will focus on specific EVOS research projects as well as the Habitat Protection Programs and is due to be finished by December 31, 1998. Distributing the video to high school science teachers and school libraries throughout the state will require up to 600 copies at a cost of $1,800 plus mailing.

- Video copies (600 @ $3) $1,800
- Postage (video and supporting materials) $2,000

Recommendations

Newspaper Flyer. The newspaper is a practical item that would serve the Trustee Council's public information efforts well during this 10th anniversary year. Since a considerable portion of the newspaper would be dedicated to spill prevention and response, the Restoration Office should fund a portion of the requested amount. I recommend paying the printing costs of $1,500 for 10,000 copies. This would be contingent on the remainder of the costs being picked up by an appropriate spill prevention/response organization. In addition, the Restoration Office should fund an extra 30,000 copies of the newspaper for distribution with the 30-minute video and for other uses.

Art & Essay Contest. The benefits of the Art and Essay Contest are numerous. The Restoration Office should fund the entire package, providing input on contest rules, prizes, judging, and creation of the calendar.

Video Distribution. The video and supporting material, such as the newspaper and the annual report, will be instrumental in encouraging teachers to dedicate classroom time to the oil spill and its ramifications. This statewide distribution effort should be funded.

Newspaper Flyer printing	$ 1,500
Reprints (30,000 copies)	$ 3,000
Art & Essay Contest	$ 9,700
Video Distribution	$ 3,800
G.A. – ADF&G	$ 400
G.A. – USFS	$ 400
TOTAL	$18,800

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

MEMORANDUM

TO: Trustee Council members

FROM: Eric F. Myers, Director of Operations

DATE: December 9, 1998

SUBJ: Small Parcels - Kodiak NWR

Attached you will find the benefits report and location map for three small parcels on the eastern shore of Uyak Bay within the Kodiak National Wildlife Refuge (former Koniag lands).

This includes:

KAP 1089	FWS 121	R. Christensen	8.13 acres	$13,000
KAP 1090	FWS 127	D. Naumoff	7.66 acres	$16,000
KAP 1091	FWS 129	D. Easter	10.42 acres	$18,000
		TOTAL:	26.21 acres	$47,000

cc: Tami Yockey
Veronica Christman
Steve Shuck

Parcel ID: Larsen Bay 10-Acre Parcels
Donna Easter, Randy Christensen, and Darlene Naumoff

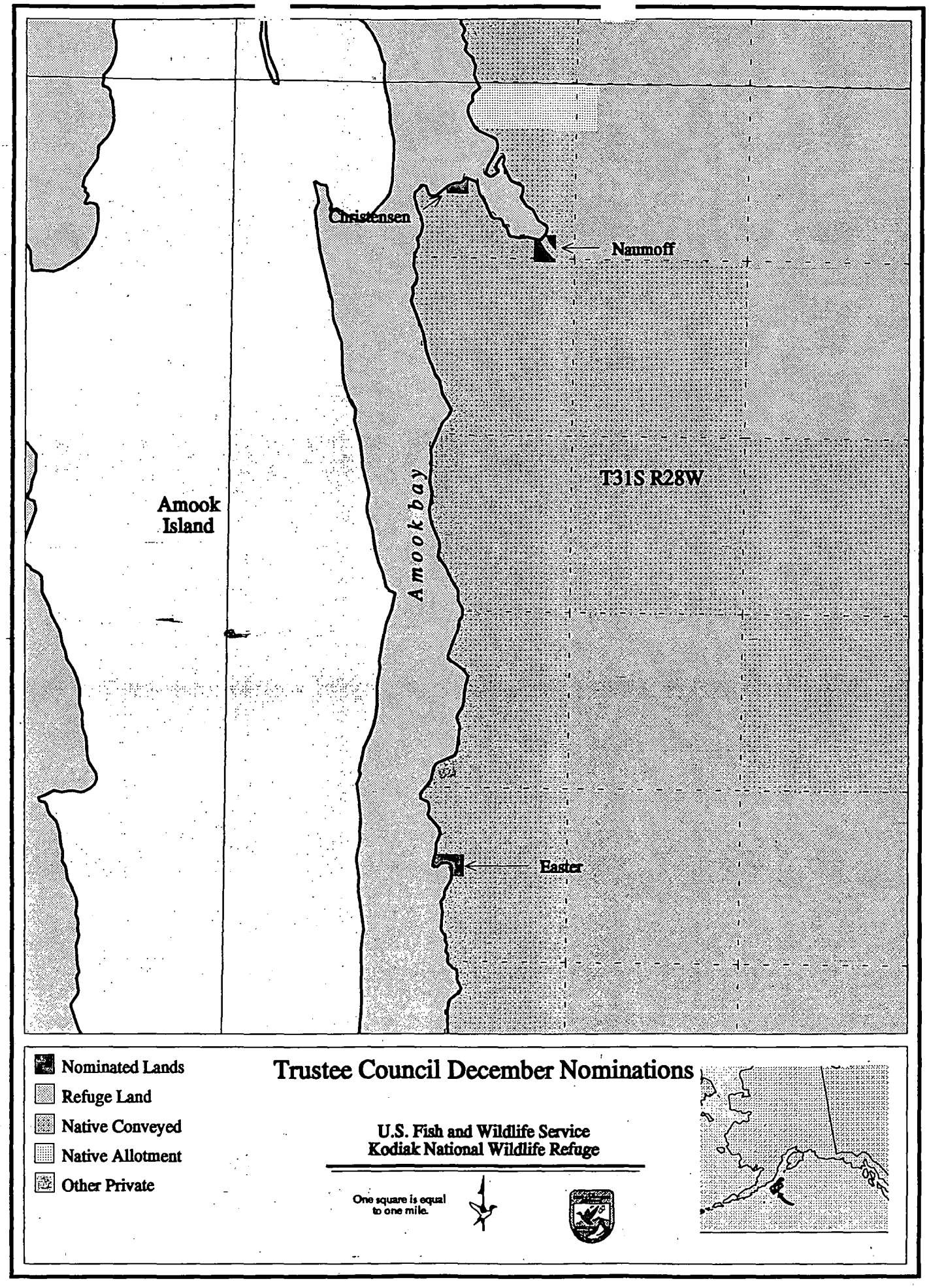
Rank: N/A	**Acreage:** 26.21	**Agency Sponsor:**	USFWS
Appraised Value:	$47,000		
Location:	Uyak Bay, Kodiak Island		
Landowners:	Donna Easter	Randy Christensen	Darlene Naumoff
Address:	1218 Twin Oaks Mr. Airy, NC 27030	P.O. Box 102 Larsen Bay, AK 99624	P.O. Box 232755 Anchorage, AK 99523

These parcels are located on the eastern shore of Uyak Bay, east of Amook Island, within the Kodiak National Wildlife Refuge. The Naumoff and Christensen parcels are at Brown's Lagoon and the Easter parcel is about four miles south of there. They are part of the lands conveyed by Koniag, Inc., to the Larsen Bay Tribal Council, and further conveyed to tribal members, including the three sellers. The surrounding Native corporation lands were purchased by USFWS at the end of September 1998 from Koniag, Inc., through funding provided by the *Exxon Valdez* Oil Spill Trustee Council, and became part of the Kodiak NWR. These three parcels would become part of the refuge as well.

Brown's Lagoon is an especially productive marine estuary, supporting high winter concentrations of seabirds in the upper reaches of the bay. Bald eagles and brown bears concentrate at Brown's lagoon to feed on spawning fish. Numerous bald eagle nests occur near the properties. A salmon spawning stream runs through the Naumoff parcel, which sits at the very mouth of Brown's Lagoon. The associated riparian habitat is used for nesting by harlequin ducks. A small colony of pigeon guillemots occurs near the property, where they feed in near shore marine waters that also host marbled murrelets, and wintering sea ducks and loons. In addition, Uyak Bay has some of the highest concentrations of sea otters on Kodiak Island. Cultural sites likely exist on the properties, but they have not been intensively explored for these sites.

These parcels and surrounding area have been used by residents of the area for subsistence purposes, primarily hunting for brown bear and Sitka black-tailed deer, harvesting salmon, gathering shellfish, and berry picking. The accessibility and natural values of the properties give them significant development potential.

Developments have been occurring on a number of these tracts, which are subject to borough taxation. These developments are generally cabin sites used for recreational and subsistence hunting and fishing purposes, often by individuals who purchased them from the original tribal member owners. Continued development in this area could adversely impact water quality and fish and wildlife habitat. The acquisition of this parcel will help to preserve the wilderness, recreational, and subsistence restoration benefits of the Koniag large parcel acquisitions.


Christensen
Naumoff
Amook Island
Amook bay
T31S R28W
Easter
Nominated Lands
Refuge Land
Native Conveyed
Native Allotment
Other Private
Trustee Council December Nominations
U.S. Fish and Wildlife Service
Kodiak National Wildlife Refuge
One square is equal to one mile.

Parcel ID: KEN 1084
Morris Parcel

Rank: PMSC **Acreage:** 40 acres **Agency Sponsor:** ADF&G

Location: Ninilchik River, T1S, R13W, Sec 31

Landowner: Dorothy Morris

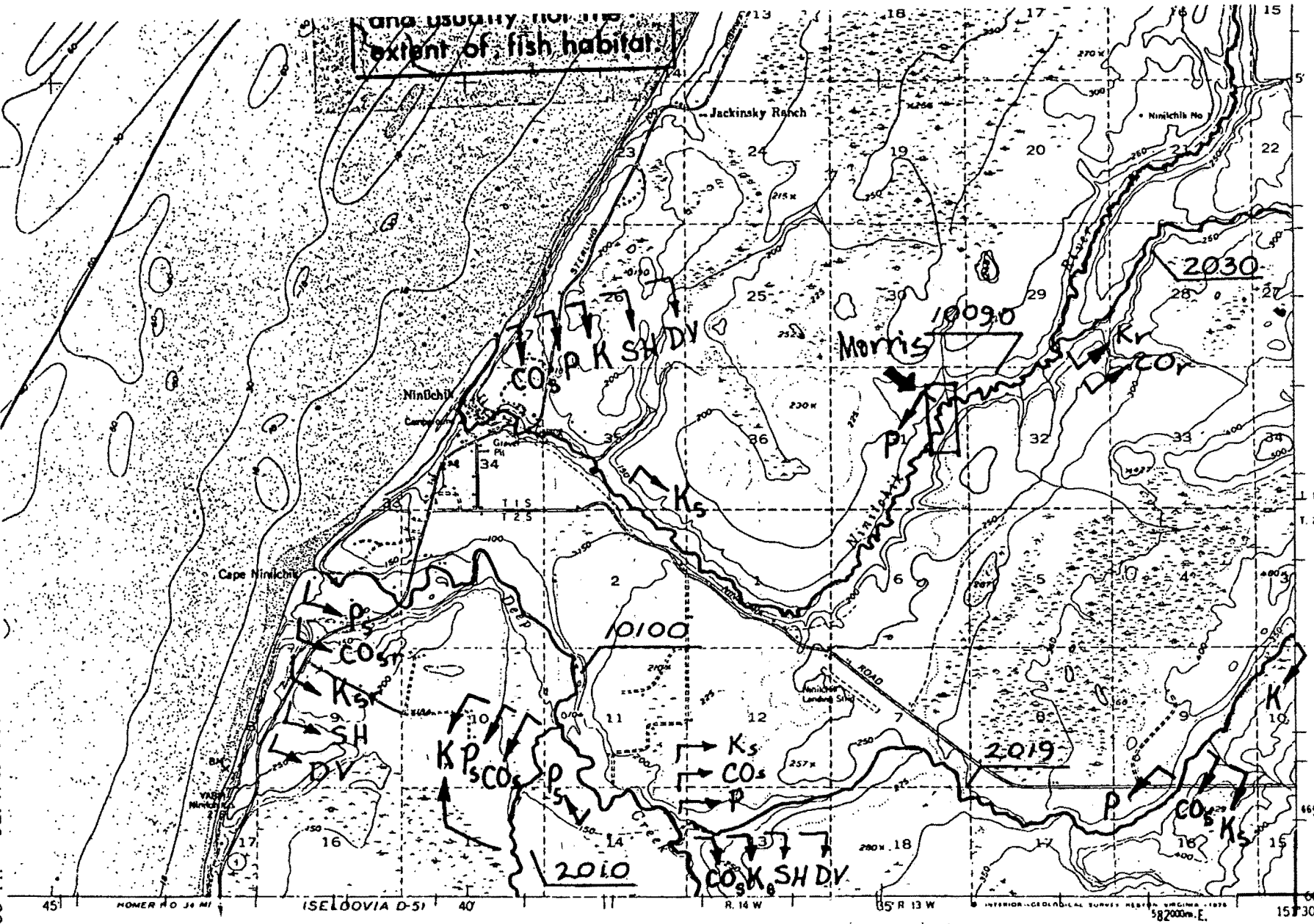
Address: 2816 Essex Circle
Woodward, Oklahoma 73801

The ADF&G requests EVOS Trustee Council approval to acquire a 40-acre parcel on the Ninilchik River. The department is nominating the Morris property as a Parcel Meriting Special Consideration under the EVOS Small Parcel Acquisition Process. The Habitat Protection Work Group has evaluated the parcel and assigned it a relative ranking score of 18, which places it just below Moderate in terms of restoration value.

The Morris parcel includes both banks of the Ninilchick River for a distance of several hundred yards and provides key habitat for pink salmon and Dolly Varden. It also provides exceptional recreational values. According to the Alaska Sportfishing Association this section of river produces some of the best steelhead fishing to be found in the Ninilchik River drainage. Other fish species using this section of river for spawning or rearing include chinook and coho salmon. Brown bear, black bear and moose frequently range along the property's river corridor and can be found in upland portions of the parcel as well.

The property is accessed by Brody Road, which serves as a conduit for logging operations in the lower Ninilchik River drainage. Much of the land in the Ninilchik River drainage is privately owned and has experienced increased levels of timber harvest in recent years. Development of homesites and recreational parcels is also occurring at an increasing pace. Therefore, the value of protecting properties such as the Morris parcel assumes greater significance as habitat loss and secondary impacts accelerate throughout the watershed.

The property is completely undeveloped, and access to the Ninilchik River presently occurs along a section line easement. If the parcel is acquired it will be managed primarily for habitat protection. A primitive trail may be constructed to facilitate enhanced recreational access.



SCALE 1:63360

1 0 1 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET

DOTTED LINES REPRESENT 25 FOOT CONTOURS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOWER LOW WATER

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 17 FEET

ROAD CLASSIFICATION

Medium-duty ——— Light-duty ———

Unimproved dirt - - - - - -

State Route

ALASKA

QUADRANGLE LOCATION

KENAI (A-5), ALASKA

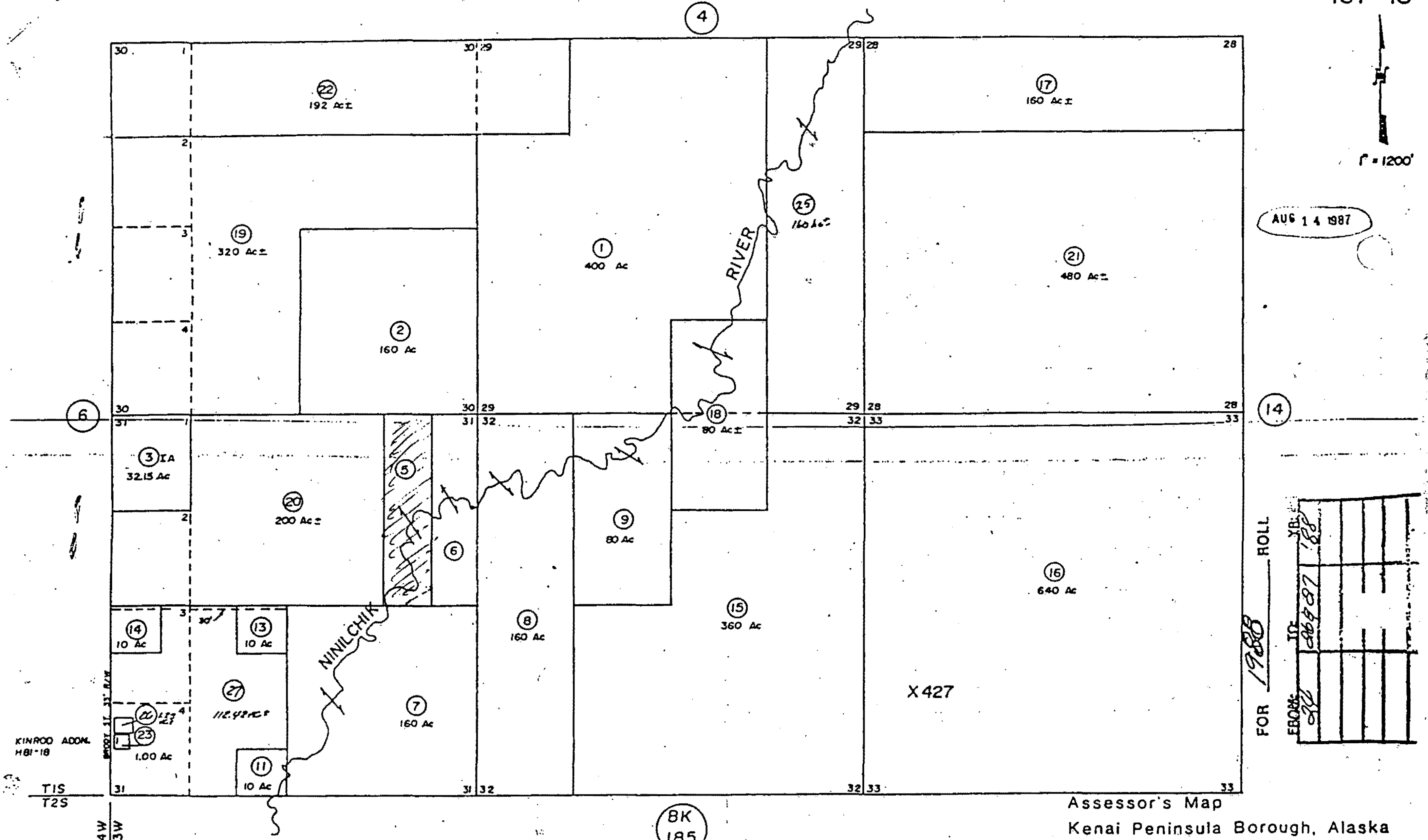
N6000—W15130/15X22.5

1951

MINOR REVISIONS 1977

SEC. 28, 29, 30, 31, 32, 33, T1S, R13W, S.B.&M.

157-13



Assessor's Map
Kenai Peninsula Borough, Alaska

NOTE – Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

KEN 1086: Mouth of Stariski Creek

Acreage: 48 **Rank:** PMSC **Sponsor:** ADNR **Appraised Value:** unknown

Owner: Lillian M. Miller

Location: Parcel fronts on Cook Inlet and includes land on both sides of the mouth of Stariski Creek.
Parcel 1: T4S R15W S2, Homer Mer. Government lot 1, Ex Walli Tract (47 acres, M/L) plus parcel #2: T4S R15W S2, Government lot 1, Tract A, 1.0 acre.

Parcel Description. This parcel contains 2,000 feet of frontage on Cook Inlet and includes land on both sides of Stariski Creek at the creek mouth. The parcel consists of gently rolling hills with with cottonwood, alder, willow, wetland adjacent to creek. Grassy dunes exist along the beach front. Parcel #2 is a one acre parcel within the overall boundaries of Parcel #1. Access to the beach is provided from Parcel #1.

Restoration Benefits. Public ownership of this parcel will protect habitat for pink salmon, dolly varden, and recreation/tourism by preventing further development on this parcel. Acquisition will also ensure public access to the beach along Cook Inlet and the rich intertidal areas for students, tourists, and the public at large. . If the parcel is not acquired, future development could result in user conflicts between the public and private property owners as the Volcano Learning Center is developed just upland of this parcel.

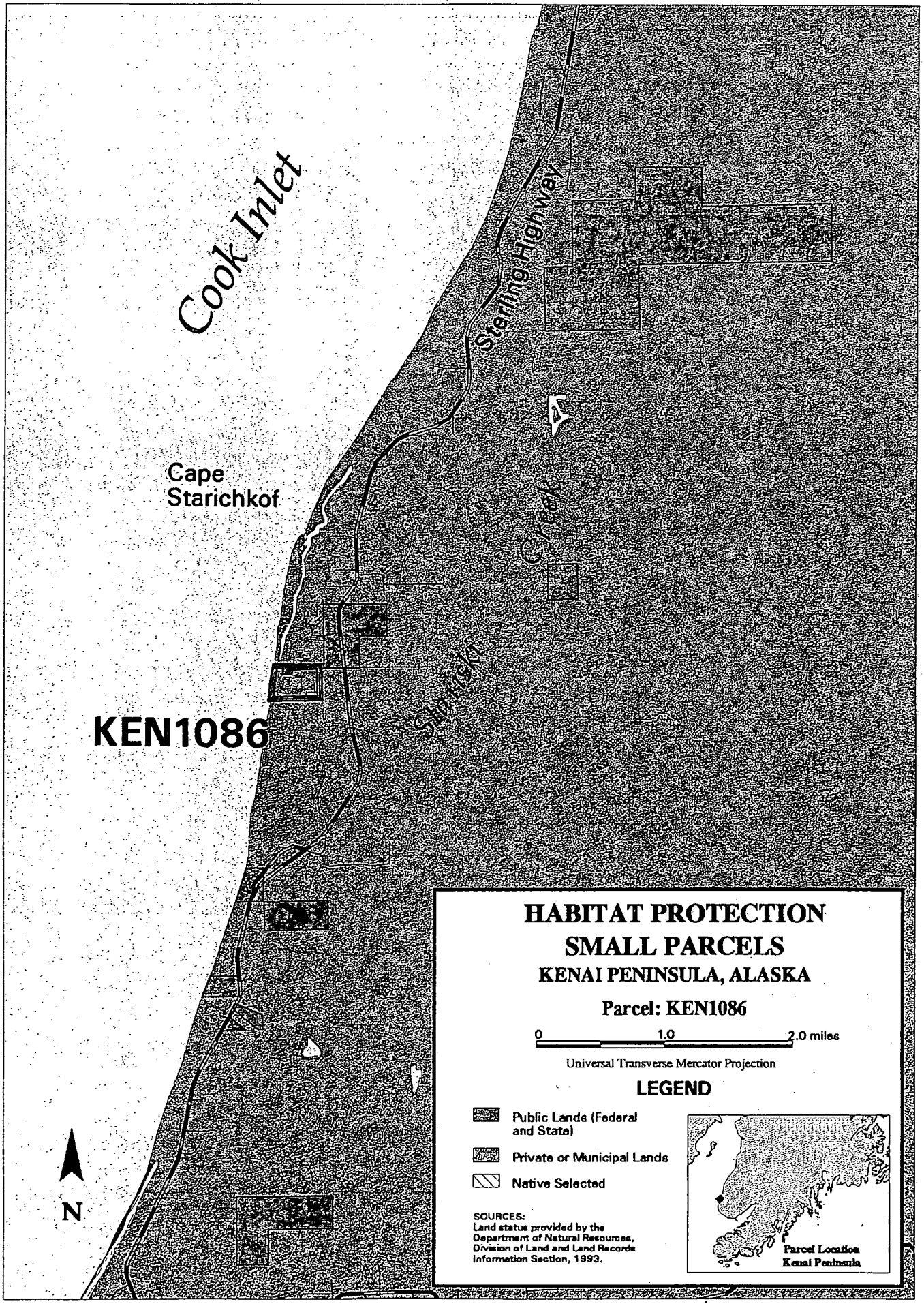
Key habitat and other attributes of the parcel include the following:

- *Pink salmon* spawn in the anadromous stream on the parcel.
- *River Otters* are common along Stariski Creek and the beach area.
- *Harlequin Ducks* nest along the river.
- *Dolly Varden* are found in Stariski Creek.
- *Recreation/tourism.* Access to one of the most beautiful and accessible beaches along Cook Inlet will be preserved. Recreational fishing will be maintained according to existing rules and regulations. Integration of services with the Volcano Learning Center has the potential of providing a captive audience with unique environmental education and recreational opportunities encompassing terrestrial and aquatic systems.

Potential Threats.

Appraised Value. The State requests permission to pursue an appraisal of this property.

Proposed Management. The parcel would be managed to protect the integrity of the fragile Stariski Creek estaury and surrounding uplands. The beach along Cook Inlet is one of the most beautiful and accessible along the eastern shore and DNR Division of Parks would like to facilitate access to that beach. Fishing in the creek is currently closed most of the time, so no additional fishing access is anticipated. The land just north of the parcel was recently purchased by the Kenai Peninsula Borough for the planned North Pacific Volcano Learning Center. The Division of Parks may explore the possibility of integrating aspects of management of the Kenai Peninsula Borough parcel with this parcel to promote protection of the parcel and consistency for the public.


Cook Inlet
Sterling Highway
Cape
Starichkof
KEN1086
N
HABITAT PROTECTION
SMALL PARCELS
KENAI PENINSULA, ALASKA
Parcel: KEN1086
0
1.0
2.0 miles
Universal Transverse Mercator Projection
LEGEND
Public Lands (Federal and State)
Private or Municipal Lands
Native Selected
SOURCES:
Land status provided by the Department of Natural Resources, Division of Land and Land Records Information Section, 1993.
Parcel Location
Kenai Peninsula

JOURNAL OF COMMERCE
DECEMBER 07, 1998

Data updates set for Sound

ENVIRONMENT

Environmental information used in Prince William Sound oil spill responses will be updated in coming years by government and private organizations.

The project calls for updating sensitivity maps more than 15 years old and using the results of studies made since the Exxon Valdez spill in March 1989. The state Department of Environmental Conservation is contributing $27,900 to the effort. For more infomation, call Larry Iwamoto at 907-269-7683.

ANCHORAGE DAILY NEWS
DECEMBER 6, 1998

Spill money is being wasted

While I was glad to see the governor approve habitat purchases by the Exxon Valdez Oil Spill Council (Daily News, Nov. 25), let's not forget the political forces pulling on this board. Sen. Murkowski is admittedly opposed to protection of fish and wildlife habitat with the restoration reserve fund. Unlike most Alaskans, Murkowski would prefer that what's left of the Exxon settlement be poured into more big research. Fishers in the spill zone are well aware of the importance of protecting habitat to healthy salmon stocks; they don't need more research to tell them that.

Feeding healthy river otters North Slope crude oil is one of the "research" projects at the partially EVOS-funded SeaLife Center. "Perhaps the most far-fetched research projects to come out of the spill," according to Alaska Business Monthly (November 1988, Page 74). Oil is bad for river otters. Why do we need to know whether it's bad at one part per billion or one part per million? Personally, I was also sickened to learn that children visiting the SLC are told about this otter study. This project clearly demonstrates that money can be better directed. Funds would be much better spent on protecting the homes of river otters from high-impact logging roads and coal extraction like those planned in the Copper River Delta.

EVOS money spent on habitat protection ensures the long-term health of our coastal communities: industry in fishing and tourism and, in some instances, time for Alaska Native corporations to plan their development sustainably while also providing for their shareholders in the short run. May the EVOS trustees leave an honorable legacy by choosing to protect habitat.

For your information: The project is entitled "Responses of River Otters to Oil Contamination: A Controlled Study of Biological Stress Markers" (# 99348) by ADFG Boyer and Ben-David, and L. Duffy from UAF.

— Michelle Wilson
Anchorage

ANCHORAGE DAILY NEWS
DECEMBER 5, 1998
PAGE 1 OF 2

[illegible] lions' fall blamed on fisheries

Helping Stellers may hurt pollock fishing, feds say

By BEN SPIESS
Daily News reporter

Pollock fishing in the Bering Sea is harming endangered Steller sea lions, federal fisheries managers declared Friday.

"We've got heavy fishing in areas where Stellers are disappearing. It's clear there is a problem," said Andy Rosenberg, deputy director of the National Marine Fisheries Service.

Linking pollock fishing to the sea lions' plight means the NMFS must now decide how to curb the state's largest and most valuable fishery to lessen the impact on sea lions.

Because of the decision Friday, a slate of proposed changes will be brought before the North Pacific Fisheries Management Council, which meets in Anchorage next week. Proposals include breaking up the pollock fishing season, restricting catch in critical Steller areas and creating no-fishing-for-pollock zones around sea lion haul outs.

Industry leaders expressed dismay at the decision and predicted fishermen will suffer if NMFS enacts the changes to the fishery.

On the conservation side, environmentalists said recognition that pollock fishing hurts Steller sea lions is long overdue.

"Our question is: Do these (proposed) changes do enough?" said Dorothy Childers, executive director of the Alaska Marine Conservation Council.

The Steller sea lion began an alarming slide toward extinction in the late 1960s. Since then, the Alaska population has fallen more than 70 percent to less than 40,000 animals today. While the population is slipping across the Alaska coast, the western Alaska stock — from Prince William Sound out to the Aleutian Chain — has fallen most dramatically. In the same waters where trawlers pull 2.5 billion pounds of pollock from the sea each year, biologists believe sea lion pups are dying for lack of food. Adults appear to be undernourished.

In 1990, NMFS deemed the species threatened. Last year, the federal government ruled the Stellers endangered. Fishermen and environmentalists have been waiting for the decision about fishing and sea lions since.

Rosenberg acknowledges that scientific certainty linking the fishing to the sea lion problems is missing but said that NMFS has a strong circumstantial case against pollock fishing.

Since the late 1970s, pollock has evolved from a small-scale fishery to a massive annual

Please see Back Page,
SEA LIONS

SEA LIONS: Feds blame Stellers' fall on fisheries

Continued from Page A-1

take of 2.5 billion pounds of fish worth about $650 million. As more boats headed onto the waters and critical areas were overfished, the harvest concentrated on the rich waters in the eastern Bering Sea. Biologists believe 70 percent of the pollock catch comes from critical Steller habitat. Increased fishing effort shortened the fishing season from 10 months in 1990 to less than three months in 1998.

The brief, intense fishing seasons in small areas leads to locally depleted pollock populations in the crucial sea lion habitat, Rosenberg said.

Industry officials said the case against fishing is not strong enough.

"There's circumstantial evidence but no direct connection that fishing is hurting sea lions," said Glenn Reed, executive director of the North Pacific Seafood Coalition, a fishermen's group.

Reed said that climactic changes in the Bering Sea could be affecting prey available to pollock. He also cited studies that report Stellers feed at depths different from where trawlers fish.

But now that the decision is made NMFS is required to create solutions to minimize fishing impact on Stellers. Although NMFS has final authority on changes to the fishery, the North Pacific Council will consider and likely vote on potential changes at its meeting next week.

NMFS proposes to break pollock fishing, currently done in the winter and fall, into four shorter seasons. The goal is to spread fishing over time and reduce local depletion, particularly in winter when female sea lions are nursing and pregnant.

NMFS officials also want to reduce the amount of fish taken out of critical habitat areas to leave more prey fish for Stellers. They further propose to expand no-fishing zones around sea lion haul outs from Resurrection Bay near Seward out through the Aleutian Chain.

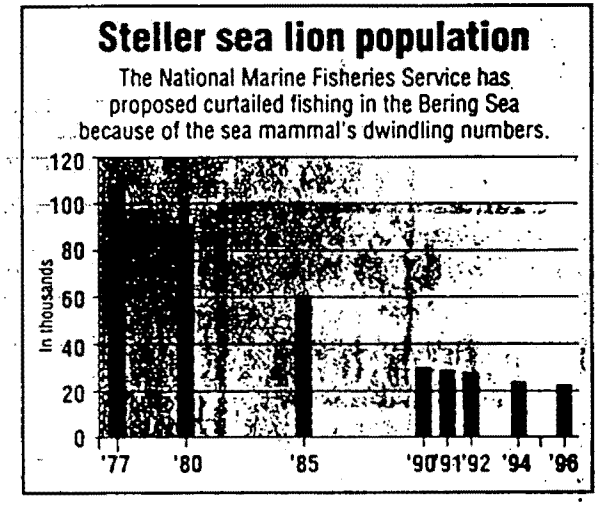
Jay Stinson, a Kodiak fisherman and president of the Alaska Draggers Association, said the changes mean more expensive fishing.

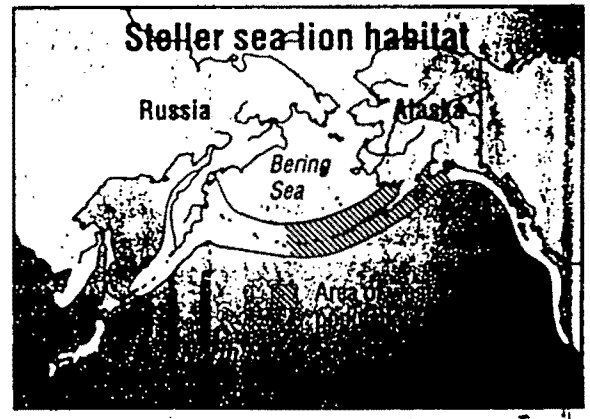
"We don't even know if these changes are going to make a difference," he said.

Rosenberg said claims that fishing and Stellers are unrelated are not relevant.

"People have been trying to make a complicated debate out of a simple question. We've got to act to protect the species," he said.

□ Reporter Ben Spiess can be reached at bspiess@adn.com.





RON ENGSTROM / Anchorage Daily News

ANCHORAGE DAILY NEWS
DECEMBER 5, 1998
PAGE 2 OF 2
SEA LIONS' FALL BLAMED ON FISHERIES

We all need to cherish Alaska for our future

By DEBORAH L. WILLIAMS

COMPASS
POINTS OF VIEW FROM OUR COMMUNITY

For the last five years, I have had the honor of serving as special assistant to the secretary of Interior for Alaska.

In this capacity, I have had the opportunity of working with wonderful people throughout Alaska on some of the most important and exciting issues facing our State. Upon my departure, I would like to share a few thoughts and questions.

Many of us live in Alaska because it is the most beautiful, expansive, and wild place in the United States. We live in a natural environment that inspires awe and passion; an environment that is unmatched in its vastness, scenic grandeur and offerings of pristine, sustaining habitats.

We also live in an environment that sustains flourishing Alaska Native cultures and a diversity of families and perspectives. The specialness of this land and its people cannot be overstated. Our magnificent uniqueness is something to celebrate.

The very word "Alaska" evokes a stirring, positive reaction. Simply residing in this state makes an Alaskan an immediate focus of attention in the Lower 48 and in many places in the world, a common reaction being, "Oh, you are from Alaska, I have always wanted to visit Alaska." We live in a land people dream about.

People dream about our state in part because its magnificent landscapes sustain a thriving biota, a robust, healthy, interconnected genetic family of thousands of species. Man's innate interest in and compassion for other animals starts early. Infants and children are fascinated with and relate intensely to animals. It is something very basic, perhaps founded on the deepest of truths that we all come from one source and that all species have an extraordinary and improbable specialness.

We have the ability to self-regulate our behavior, to envision and achieve a healthful, diverse, harmonious species and culturally rich world. This is one of the greatest challenges for the new millennium.

Fortunately, our relationship with our fellow humans and with our fellow species is evolving, and in most instances, improving. We have the power to annihilate, yet have chosen not to. We have the power to enslave, and in most societies have stopped doing so. We have the power to despoil our earth incrementally and relentlessly. Whether we follow this course remains to be seen. There are many hopeful signs that we will not, but there are also new threats.

Importantly, we have the ability to self-regulate our behavior, to envision and achieve a healthful, diverse, harmonious species and culturally rich world. This is one of the greatest challenges for the new millennium.

How do we do it? Alaska can serve as a source of inspiration for this critical inquiry. We, who cherish Alaska, have the opportunity to extol and enhance Alaska's world class — perhaps universe class — natural and cultural environment; to make Alaska a model. And we can start asking the important action-shaping questions locally, nationally and internationally.

What do we want Alaska to be like in the year 3000? Can we self-regulate our own population numbers, our consumption levels and patterns, and our other behaviors to sustain our ecosystems and our diversity? Can we embark upon a dialog we that will result in a series of collective, thoughtful pledges about our future?

One pledge might be that we will define and choose a course of personal and statewide action that will insure that Alaska's beauty will be enjoyed 1000 years from now; that, for example, the future residents of Anchorage will be able to see Denali from the city because we have maintained clean, healthful air. We could agree to eschew actions, either singular or cumulative, that will readily result in the extermination of species in Alaska in the next millennium.

Another oath might be that we will insure that our great-great-great-great-great-grandchildren will be able to fish throughout the state in clean waters, and that we will provide these same children the opportunity to hear the heart of the earth beat in the quiet and respect-inspiring complexity of the wilderness. Similarly we could pledge that we want our children to hear and understand the significance of the beat of an Inuit, Yupik, Athabascan, Aleut or Tlingit-Haida drum.

We need pledges for our new millennium to give us guidance, vision, hope and confidence that we will not allow short-term needs to usurp our most fundamental moral obligations toward other living things. Let's begin the process.

There is a tremendous basis for optimism. We have the technologies and medical advances to sustain an unparalleled quality of life, if we consciously choose to live within the Earth's fundamental biological and physical parameters.

We have the intelligence and moral capacity to step back, assess what is possible in the long run, and determine what is desirable from a world view based on compassion, cooperation and foresight. As a state, we need to take stock of what is special about us and our land — what we want our great-great-grandchildren to be able to enjoy.

As the special assistant to the secretary for Alaska, I have observed the expensive and perhaps less than entirely successful attempts to repair Lower 48 ecosystems and cultures that have been destroyed or seriously impaired. The costs are so great to all of the species involved, including Homo sapiens. Let us vow not to let it happen here.

Deborah L. Williams is special assistant to the secretary of the Department of the Interior.

ANCHORAGE DAILY NEWS
DECEMBER 5, 1998

Kodiak fish projections don't look good for '99

KODIAK (AP) — Herring and salmon fishermen in Kodiak should plan on catches well below average in 1999, according to preliminary figures from the state Department of Fish and Game.

Kodiak's sac roe herring harvest is expected to down near a record low, while the overall salmon catch is projected to come in at about half of what was caught this year.

The preliminary estimate for sac roe herring is 1,700 tons, which is about 300 tons less than in 1998 and less than a third of the record 5,900 tons caught in 1994.

"What we're seeing now is the fishery getting back to more 'normal' levels, like we saw in the early '80s and '90s," said Dennis Gretsch, a Fish and Game biologist in Kodiak.

Although Kodiak's herring numbers are expected to be down, the statewide total should not vary greatly from the past several years, another biologist said.

The statewide sac roe herring harvest is expected to be in line with the recent average of 45,000 to 50,000 tons, said Herman Savikko, a Fish and Game spokesman in Juneau.

ANCHO_GE DAILY NEWS
DECMEBER 4, 1998

State expects better run of Inlet reds in '99

By JON LITTLE
Daily News Peninsula Bureau

SOLDOTNA — Cook Inlet's commercial red salmon catch next year could reach 2 million fish, more than last summer's but a far cry from big hauls of recent years, state biologists say.

"The 10-year average leading up to this is 4.6 million, so 2 million is pretty shabby by comparison," said Paul Ruesch, the upper Inlet's area management biologist for commercial fisheries.

Last summer, commercial fishermen netted 1.2 million reds in a season that stalled almost before it got going. Right as the typical mid-July heart of red salmon fishing was gearing up, Ruesch ordered commercial nets out of the water because so few reds were returning to the Kenai River.

At the same time, biologists cut Kenai River sportfishing bag limits from six fish to three and created a dusk-to-dawn angling curfew for bank anglers.

Enough salmon eventually made it upriver to spawn. Restrictions were eased and commercial fishermen were allowed back in early August to catch the tail end of the run.

While the Kenai River is hardly the only fish-producing stream in Cook Inlet, it produces almost as many salmon as the other rivers combined.

Fish and Game is projecting that roughly 3.5 million red salmon will swim up Cook Inlet next summer. If the forecast pans out, the Inlet's commercial fleet will be permitted to net 2 million of those fish and the remainder will travel up the Kenai River and the Inlet's

Please see Page D-3, REDS

REDS: Biologists forecast stronger run of Inlet reds

Continued from Page D-1

countless other salmon streams to spawn. Some will be caught by anglers.

The state Department of Fish and Game bases its estimates on three observations. Mainly, it looks at the amount of juvenile salmon that swim out to sea from the Kenai River each year. A red salmon has an average five-year life cycle, though some of the fish return in four or six years. A weak batch of young fish observed in 1993 indicated last summer's run would be bad, and it turned out worse than forecast, biologists said. The river produced a low number of juvenile fish again in 1994, meaning the coming season should be weak, too.

"This should be the bottom as far as we can tell," said Ruesch, who is retiring this spring after 18 years of managing the upper Inlet red salmon fishery. "We should see some rebound beginning with the year 2000."

Other factors used in the calculation include the number of 4-year-old reds that spawned last summer, a year ahead of their brothers and sisters. Biologists also track the percentage of reds that typically survive the high seas, Ruesch said.

He was quick to point out that a fisheries forecast is anything but precise.

This forecast will be the last for 47-year-old Ruesch, who is retiring May 1. The department hasn't selected a replacement.

It was Ruesch who decided when commercial nets would go in and out of the water each summer, which affects not just the multimillion-dollar commercial processing industry but an equally massive sportfishing industry that has sprouted up along the banks of the Kenai River. Commercial and sport fishermen often are at loggerheads over salmon allocation.

Being at the center of one of the most divisive, complex fisheries in Alaska hasn't been easy, he said.

Ruesch said he hasn't given much thought to what job he might take next. "My suspicion is that if I do anything ever again, it won't be to do with fish," he said.

He said his main priority next summer will be to catch up on the recreation he's largely missed for nearly two decades, which includes some fly-fishing.

"I've always been an avid sportfisherman," Ruesch said, stressing that he prefers lake fishing for trout. "I have a hard time catching a salmon without it bringing back all the job-related baggage."

Reporter Jon Little can be reached at jlittle@adn.com.

Kodiak herring, salmon look weaker next year

The Associated Press

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Kodiak's salmon catch of 13.9 million fish for 1999 will be well below the 10-year average, said state biologist Dave Prokopowich.

The catch forecast is 9.5 million pink salmon, 3.5 million reds, 500,000 chums, 350,000 silvers and 20,000 kings.

The 1998 catch of 26.4 million fish produced an unexpected boost to Kodiak's salmon fleet. Fish and Game estimated its value to the fishermen at $29.8 million.

The 1999 statewide salmon forecast will be released later this month, Savikko said.

The Anchorage Times

Publisher: BILL J. ALLEN
"Believing in Alaskans, putting Alaska first"
Editors: DENNIS FRADLEY, PAUL JENKINS, WILLIAM J. TOBIN
The Anchorage Times Commentary in this segment of the *Anchorage Daily News* does not represent the views of the *Daily News*. It is written and published under an agreement with former owners of *The Times*, in the interests of preserving a diversity of viewpoints in the community.

Buying land

THE OIL SPILL Trustee Council decided last week to use another $70 million to buy up more private land in Alaska and to convert that land to federal and state parks. The money comes from funds remaining from the settlement of damages from the 1989 Exxon oil spill.

The action was criticized by Sen. Frank Murkowski, who has no say in the council's actions. Gov. Tony Knowles lauded the decision by the council, three of whose members he appoints — and who serve with three others selected by the president.

The trustees agreed to buy 41,750 acres of timbered land on Afognak Island. Knowles endorsed the purchase: "Protection of these rich habitat areas benefits all Alaskans by helping maintain strong fish and wildlife populations while at the same time supporting recreational uses and traditional subsistence activities."

Murkowski had a different view. He faulted the trustees for exceeding the appraised value of the acreage involved, noting much of the timber already has been harvested. The senator said the council previously purchased more than 450,000 acres in the area, and has spent almost half of the billion-dollar settlement on land acquisitions. "Once the settlement money is gone, it is gone, but any problems generated by the spill might live on."

MURKOWSKI PREFERS to see settlement money invested in scientific research. "All the money possible should be set aside to sustain important fisheries and for ecosystem research to help generations still to come."

Gov. Knowles believes acquisition of the Afognak land is more critical for Alaska's future. "The area is vitally important for the reproduction of harbor seals, salmon, sea otters, harlequin ducks and sea birds. It is locally valued for its archaeological and rich cultural resources. And it has incredible potential for hunting, fishing, kayaking and other recreational uses."

The governor described land purchases made with the settlement money as "Alaska's other permanent fund."

Both Knowles and Murkowski were recently re-elected to their jobs by wide margins. This would indicate public support for their policies and decisions in office. And, more often than not, Murkowski and his two counterparts in the Alaska congressional delegation — Sen. Ted Stevens and Rep. Don Young — align with the governor on matters affecting the state.

On this one, though, Murkowski and Knowles are 180 degrees apart. And since the governor and the Clinton administration control the votes on the council, land acquisition probably will continue to be a high priority.

Unless, of course, Murkowski can persuade the public to speak out in favor of investing in scientific research and education.

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ANCHORAGE DAILY NEWS
DECEMBER 4, 1998

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The Anchorage Times

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"Believing in Alaskans, putting Alaska first"
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KODIAK DAILY MIRROR
DECEMBER 3, 1998

Salmon, herring managers forecast fewer fish in 1999

By MARK BUCKLEY
Mirror Writer

Kodiak herring and salmon fishermen should not plan on bumper crops next year, according to preliminary forecasts released by the Department of Fish and Game. The Kodiak sac roe herring harvest should approach its historical low, and the overall salmon catch is predicted to come in at less than 14 million.

"Our preliminary guideline harvest level for 1999 roe herring is 1,700 tons," said Dennis Gretsch, Fish and Game's assistant area management biologist. "In comparison, 2,030 tons were caught in 1998 and the record was 5,893 tons caught in 1994."

Gretsch said catches in 1999's projected range have been seen before.

"If you look at the history of the herring fishery, you see harvests of less than 1,700 tons in both 1986 and 1987," he said. "For example, the actual catch in 1986 was 1,558 tons.

"What we're seeing now is the fishery getting back to more 'normal' levels, like we saw in the early '80s and '90s, when catches were around 2,000–2,700 tons," he continued. "We had a real herring boom in the 1987–88 brood years. Conditions must have been perfect for the fish then; but it couldn't last."

Gretsch said he expects the areas that were open to fishing in 1988 will also be open when herring season begins April 15. Last spring's harvest was worth an estimated $617,000 to the fleet.

Although Kodiak's herring numbers could be down, the statewide total should not vary greatly from the past several years, a biologist said.

This comes despite Fish and Game's announced closure of the Kamishak Bay fishery.

"Statewide, the 1999 Alaska sac roe herring harvest is expected to be approximately similar to the recent average harvest of 45,000 to 50,000 tons," said Herman Savikko, information officer with Fish and Game's commercial fisheries division in Juneau.

"The Kamishak Bay fishery, in lower Cook Inlet, will not open next year," he added, "but catches there the past two seasons have been so low they contributed very little to the statewide total.

"On the other hand, the preliminary forecast for Sitka Sound shows an increased catch.

"Herring abundance levels typically increase abruptly following major recruitment events, then decline slowly over a number of years because of natural and fishing mortality," he said.

Turning to Kodiak salmon, a total predicted catch of 13.9 million fish, for 1999 is unlikely to gladden the fleet.

"It will be well below the 10-year average," said Dave Prokopowich, Fish and Game's area management biologist in Kodiak.

See SALMON, Page 2

Salmon

Continued from Page 1

"We're forecasting a catch of 20 thousand kings, 3.5 million reds, 350 thousand coho, 9.5 million pinks and 500 thousand chums.

"Of the pink salmon, we're estimating 2.4 million will come from the Kitoi Bay Hatchery and the rest will be wild fish," he continued.

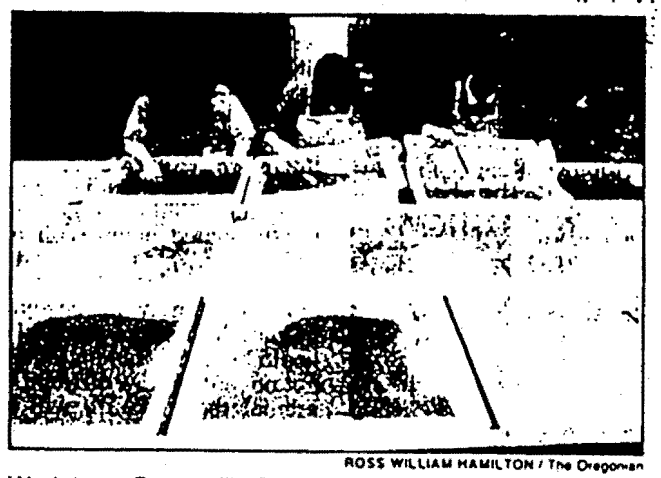
Coming in at 26.4 million fish, the 1998 salmon fishery produced an unexpected boon to Kodiak's salmon fleet. Fish and Game estimated its value to the fishermen at $29.8 million. This year's harvest was considerably above 1997's 14.4 million fish. That low catch was due in part to strikes over both red and pink salmon prices.

Prokopowich said there are some bright spots in the 1999 forecast.

"The 3.5 million reds is a good number, and the 350 thousand coho is high, too," he said. "The pink forecast is lower than we've seen in past years, but you can't continue to have record catches every year."

Turning to the 1999 statewide salmon forecast, Savikko said all the numbers are not yet in.

"We do think the pink harvest in Southeast will be strong, and that Prince William Sound will produce about 20 million pinks," he said. "But we won't be ready to release the statewide forecast for a few more weeks."



ROSS WILLIAM HAMILTON / The Oregonian

Workers at Bonneville Dam's fish hatchery near Cascade Locks, Ore., sort fish eggs recently.

Hatcheries get blame for weak salmon runs

By LAUREN DODGE
The Associated Press

PORTLAND, Ore. — Scientists told a regional planning council Wednesday that the salmon hatchery system in the Columbia River Basin isn't working, producing weak fish runs that undermine wild populations.

Fishery managers can no longer take the "Johnny Appleseed approach," randomly introducing salmon from one river to another without considering genetic differences of each stock, the scientists said in their report to the Northwest Power Planning Council.

"It's not happenstance," said Ernie Brannon, professor of fisheries at the University of Idaho. "If you have the wrong stock in an environment, you will have poor survival success."

The review, which will result in recommendations to Congress, could have major implications on the region's system of fish hatcheries, which have been put in place over the last 100 years to make up for fish losses caused by dams.

The effort has already drawn the ire of the Oregon Department of Fish and Wildlife, which manages 34 of the 100 hatcheries.

Doug DeHart, the department's chief of fisheries, calls it a disguised effort to unfairly blame hatcheries for depleted native salmon and steelhead runs rather than address the real cause of the decline — the big dams on the Columbia and Snake rivers.

"The information out there says the biggest killers of fish are those dams," he said. "Pick your issue. We've heard hatcheries are the issue. We've heard ocean fishing is the issue. We've heard about the seals and the terns and cormorants. We've heard about everything but what really kills the fish."

But John Harrison, spokesman for the council, said the intent of the review is not to single out hatcheries, but to look at them as one part of a bigger problem.

"The scientists are challenging traditional hatchery practices at the same time they are recognizing they will be an integral part of fish restoration in the Columbia Basin," Harrison said. "They're not saying kill the hatcheries but use them in a different way."

Last year, Congress asked the council and the Independent Scientific Advisory Board to review federally funded hatcheries and recommend policies to guide their use.

The council, with two members appointed by each of the four Northwest governors, was established by Congress to help restore fish and wildlife in the Columbia and Snake rivers while supplying the Northwest with dependable, low-cost electric power.

In the review, the scientists offered 21 recommendations to improve the hatchery system.

They recommend against "stock transfers:" Introducing non-native species into streams and rivers. Rather, the fish introduced to build new populations should be similar to species that once lived in the streams.

Other recommendations include using large breeding populations to maintain genetic diversity and developing small facilities engineered to simulate the natural stream, using local stocks and water.

The scientists also call for an independent peer review panel to develop a basin-wide plan.

The report will be reviewed at a workshop in January, followed by public meetings in March and April. A hatchery-by-hatchery review will be completed next year. The council intends to submit the recommendations to Congress in May.

It is not the first call for changes to the hatchery system.

"It's time to take these scientists seriously and begin to implement the changes they are recommending," said Jim Myron, conservation director for Oregon Trout, which commissioned a study several years ago that drew many of the same conclusions about hatchery fish.

■

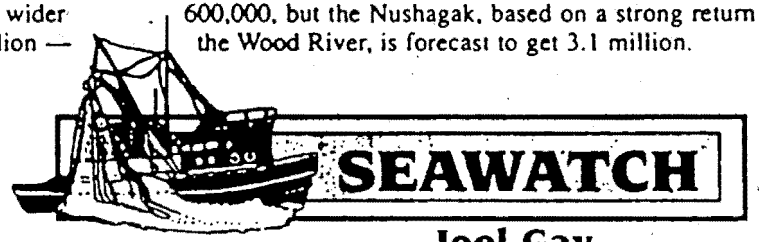
Salmon season looks bleak again for Bristol Bay

THE 1999 BRISTOL BAY sockeye season looks like another bust, according to preliminary projections from the Department of Fish and Game. But it's anyone's guess what the final catch will be, said research project leader Bev Cross. The short answer is 13.8 million reds, give or take about 100 percent. The forecast range is far wider than in previous years — 9 million to 43.4 million — and even that is only 80 percent likely, Cross said. "What we're trying to show is the uncertainty."

AFTER SEVERAL DECADES OF LOW PRODUCTION, sockeye runs in Bristol Bay changed markedly in the late 1970s, Cross said. Give credit to water temperature, low predation or something else, but for some unknown reason survival rates began to rise. As a result, preseason forecasts regularly were too low throughout the early 1980s, until Fish and Game revised its forecasting methods to take into account the improved survival. Fast forward to 1996 when the 4-year-old component came in far below forecast. In 1997 and '98, both 4- and 5-year-olds were missing, and once again Fish and Game finds that its forecasts are far off the reality meter. "We now think that maybe conditions have changed again so we're no longer in that high-production regime," Cross said.

THE CHANGES SENT BIOLOGISTS back to the drawing table when it came time to figure the 1999 forecast. She used three different time periods to create three predictions for the 1999 return. Based on the survival rates of 1956-77, this year's total run forecast comes in at 21 million — about like the last two years. Based on just the last 20 years, the numbers say to expect 33 million. When she based it on a combination of both periods — every year since 1956 — the projection is 30 million. She then tested her hypothetical projections using the same three time periods to "hindcast" the last four seasons. In some districts, the 1956-77 data came in right on target, while in others the 1956-98 data were best. Her final forecast for 1999 uses a combination of different time periods for different districts.

THE BOTTOM LINE is a return of 26 million, Cross said, which should yield a total harvest of 13.8 million reds. That gives the South Peninsula 1.3 million and leaves 11.1 million for escapement. Naknek-Kvichak is in line for 7.4 million, with 5.5 million destined for the Naknek. Egegik looks bleak at 2.5 million, Ugashik gets only 600,000, but the Nushagak, based on a strong return to the Wood River, is forecast to get 3.1 million.



Joel Gay

A GROUP OF BRISTOL BAY FISHERMEN is looking into the possibility of buying back a portion of drift permits in hopes of making the fishery more lucrative for the remainder. According to the Bristol BayTimes, Bristol Bay Native Association CEO Terry Hoefferle told the group recently that $50 million would be required to buy back some 600 permits, leaving 1,200 to 1,400 in the fishery. The money would come in the form of a loan, through the Magnuson-Stevens Act, and would the remaining fishermen would have to pay it back. The association is also hoping to set up a $5 million revolving loan fund to prevent permits from leaving the Bristol Bay region. The buyback plan is still in its infancy, and has several large hurdles to overcome, but money could be made available as early as next year, the newspaper reported.

BERING SEA CRABBERS will descend on Anchorage in force next week for what promises to be a hot day of testimony at the North Pacific Fishery Management Council. At issue is how many boats will get licenses under the new license limitation program. Originally the council figured 365, though typically the fleet for any crab fishery is 225 or less. In October, the council revised its qualifying criteria and reduced the number to 275. As it now stands, a boat must have delivered at least once in either 1996, 1997 or before Feb. 8, 1998 to get a license. But even that number was too high for many crabbers and the Department of Fish and Game, according to council Deputy Director Chris Oliver, who asked the council to tighten up qualifications and cut the number further. Fleet size is especially important in light of a buyback proposal. A group of crabbers wants to tap a provision of the Magnuson-Stevens Act that allows any fleet to buy down the number of boats, then pay back its debt through an assessment at delive- -me. Crabbers have said the optimum size of the Ber. Sea fleet is around 200 boats. If the council cuts down the fleet to 200, the buyback is a moot point. If the council settles on 230 or 250, it will require fishermen to put their money on the line. Oliver said the council is also likely to hear from boat owners who think the original reduction to 275 was too much, that economics, not government intervention, should decide the size of the fleet. The council has already given its blessing for a buyback, however. The fleet size issue is scheduled for discussion Sunday, Dec. 13. The meeting runs Dec. 9-14 at the Anchorage Hilton Hotel.

KODIAK COD FISHERMEN have bought a processing plant and are only a few weeks away from operation, according to the Kodiak Daily Mirror. Alaska Premium Cod Association took over the old Whitney plant at Fuller Boatyard. The plant actually has separate facilities for groundfish and salmon. The group, which has attracted a membership of more than 100 pot, jig and longlir ats, plans to start processing cod first, with halibut t ow next spring. The future will determine what to do with the salmon plant, said Randy Blondin, president of the group. The association is leasing the Island Seafoods plant now, and paying 40 cents a pound. Demand for Pacific cod is strong because of weak production in the Atlantic.

THE BANK MADE FOR ALASKA fishermen and farmers has paid off the last of its debt two years early, and now is free and clear. The Commercial Fishing and Agriculture Bank, better known as CFAB, was chartered in the early 1980s with $32 million in loans. Payments began in 1991 and the final payment was due in 2000. By paying off the loan early, CFAB netted a $10 million discount. The bank has been profitable since 1991, according to the Associated Press, but its loan portfolio and profits have shrunk in recent years.

Knowles approves oil spill council purchases

The Associated Press

ANCHORAGE — Gov. Tony Knowles on Nov. 24 approved two land purchases by the panel that administers state and federal settlement money from the Exxon Valdez oil spill.

The purchases by the Exxon Valdez Oil Spill Trustee Council include $70.5 million for 41,750 acres on Afognak Island and $450,000 for 76 acres along the Kenai River in Soldotna.

The Afognak purchase is aimed at protecting old-growth forest, salmon streams and river estuaries, while the purchase of nearly 2,000 feet of Kenai River frontage is intended to protect a portion of that popular salmon-fishing area.

"Protection of these rich habitat areas benefits all Alaskans by helping to maintain strong fish and wildlife populations while at the same time supporting recreational uses and traditional subsistence activities," Knowles said in a news release.

No state money will be used for the purchase, the governor's office said, but Knowles' approval was needed because the spill settlement funds are passed through the state's hands.

The Afognak acreage is adjacent to Afognak State Park and the Kodiak National Wildlife Refuge. The governor's office said the plan is for 6,200 acres to become part of the federal refuge and the rest to be incorporated into the state park.

It is seen as key breeding habitat for seals, sea otters, seabirds and fish. It's also a popular area for hunting, fishing and kayaking.

The Afognak land was bought from the Afognak Joint Venture, a partnership of several Native corporations. The partnership had been planning to do extensive logging on the land, but now will only cut timber in certain areas.

Howard Valley, chairman of the joint venture, said the partners will also be looking at recreation and ecotourism as ways to make money from its remaining land adjacent to the purchased parcel.

"In this way we plan to provide a long-term financial base for our partners, our communities and future generations," Valley said.

The Kenai River purchase brings to 2,658 acres the amount of l[illegible] along the river bought with s[illegible] funds. That land cost $8.3 million and includes nine miles of riverfront.

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PENINSULA ARION
DECEMBER 1998

Big Eddy flood map redrawn

By DOUG LOSHBAUGH
Peninsula Clarion

The U.S. Army Corps of Engineers has redrawn the map of the Kenai River flood plain in the Big Eddy area to account for mapping errors discovered because of the 1995 flood.

Harlan Legare, the Corps hydraulic engineer who corrected the old map, said the proposed map expands both the flood plain and the flood way — the area federal managers want clear of construction that might raise the water level during a flood.

The changes, if adopted by the Federal Emergency Management Agency, would subject more property to borough standards for building within the flood plain. The standards are meant to minimize flood damage, pollution and risk to life.

Representatives of the Kenai Peninsula Borough, the Corps, FEMA and the state Department of Community and Regional Affairs will be at a meeting tonight to explain the proposed revisions to the flood plain map, and answer questions from the public. The meeting is at 7 p.m. at the Borough Building at 144 N. Binkley St. in Soldotna.

Legare said FEMA requires the borough to adopt regulations governing development within the flood plain as a condition of participating in the federal flood insurance program. The program benefits local residents, he said, because without the federal program it would be nearly impossible to buy flood insurance. The federal government and Lloyd's of London are the only underwriters, he said. FEMA, which manages the federal program, sets premiums to pay program costs.

The borough and the cities of Seward and Kenai participate in the federal flood insurance program, he said. The cities of Soldotna and Homer do not.

Lisa Parker, borough planning director, said the flood plain construction standards also benefit the borough as a whole, by minimizing structural damage, pollution, economic disruption and the need for rescues and relief operations during floods.

Borough ordinances require new buildings within reach of a 100-year flood — the size expected to occur every 100 years, on average — to be anchored so that during a flood, they do not float, collapse or shift. They require construction in the 100-year flood plain to use flood-resistent methods and materials. They require new septic systems within the plain to be built to minimize infiltration or leakage during a flood, and they require new subdivisions to be designed to minimize exposure to flood damage.

The borough requires the lowest floor of new homes in the 100-year flood plain to be elevated at least as high as the 100-year flood level, or that rooms below the flood level be designed to allow water to pass through them. New nonresidential buildings in the 100-year flood plain must be designed with the lowest floor at least as high as the 100-year flood level, or designed so that rooms below the flood level are watertight and flood-proof.

Legare said that while construction is allowed at the fringes of the flood plain, that raises the water level during floods.

Federal law bans construction that would raise the water level by more than a foot during a 100-year flood, he said. Federal managers compute how much of the fringes could be completely developed without exceeding that standard. What is left is the flood way. In other words, the flood way the area that must be left unobstructed to carry the flow of a 100-year flood.

In most rivers, the flood way lies within the main river channel. Generally, Legare said, FEMA allows no construction within it. But the Kenai River meanders as it passes Big Eddy, and there, the flood way covers a large expanse of normally dry land. There are homes and subdivisions within it.

The borough ordinance allows new construction within the flood way only after a registered engineer or architect shows that the project will not raise the water level during a flood. Legare said the borough sometimes has allowed construction there with mitigation measures.

For example, if a structure requires 10 pilings for support, he said, the builder might be required to remove 10 trees. The borough's flood way management is likely to be a subject of discussion at tonight's meeting, he said.

Legare said managers discovered problems with the Big Eddy flood plain maps because of the 1995 flood. At Big Eddy, the river normally follows an S curve. During the flood, it took a straighter route, and flooded much of the two peninsulas that form the S. There was a lot of water flowing where it should not have, according to the original flood plain maps, he said.

FEMA and the Corps found an error in the 1960s topographic maps the Corps had used to define the flood plain. Legare said an area about four miles long, from which the Corps made measurements, was tipped.

"It's like making measurements off a table top," he said. "The table should have been level, but it was slanted. The error gets larger as you go downstream. It went from inches to feet."

The old flood plain maps of the Big Eddy area were off by as much as 8 feet, he said.

To make the new map, FEMA hired a surveyor to locate known elevations, place markers visible from the air, and make stereoscopic aerial photos. From the photos, they developed new topographic maps, Legare said.

Legare used a computer model to calculate flood levels at cross sections of the new topographic maps. From those, he drew the new map of the flood plain.

Parker said federal managers will define the final flood map. The borough has no role. She said the new map will not likely become final for another six months.

'Partners in Prevention' symposium planned to mark spill anniversary

By Tony Bickert
Valdez Vanguard

Using slogans such as "A Decade of Progress," "Dawn of a New Age" and "Doing it Right," the oil industry and its government regulators have released a draft agenda of a two-day symposium to be held here in March to mark the 10th anniversary of the Exxon Valdez oil spill.

Titled "Partners in Prevention," the March 21-22 symposium will focus on the advances made in safer transportation of oil through Prince William Sound since the infamous tanker ran aground off Bligh Reef on March 24, 1989,, spilling 11 million gallons of North Slope crude.

Among the speeches, conferences and panel discussions planned at the Valdez Civic Center:

• Valdez in the Last Decade — panel discussion with former Valdez Mayors John Devens, Lynn Chrystal, John Harris and current Mayor Dave Cobb.

• A Reflection of the Oil Pollution Act of 1990 — speech by Alaska U.S. Sen. Ted Stevens.

• How Oil Has Affected Alaska — panel discussion with former Alaska Governors Jay Hammond Bill Sheffield, Steve Cowper and Wally Hickel.

• Doing it Right — speech by Gov. Tony Knowles.

• A Decade of Progress — panel discussion with members of industry, Coast Guard, Prince William Sound Citizens' Advisory Council and Alaska Department of Environmental Conservation.

Also planned are tours of the Coast Guard Marine Safety Office, Alyeska Pipeline Service Company's tanker escort and response vessels, Valdez Emergency Operations Center and the RCAC office.

The symposium is being coordinated by Prince William Sound Community College. For more information, call the college at 834-1610.

Oil briefs

Surprise spill drill tests skimming barge

The Alaska Department of Environmental Conservation and the Coast Guard called an unannounced oil spill response drill on Alyeska's Ship Escort Response Vessel System Monday.

The drill, held at Shoup Bay in Port Valdez, was designed to test the readiness of an unmanned equipment barge that is stationed in Port Valdez in the event of a real emergency. The barge has three oil skimmer on board.

An Alyeska tug boat towed the barge into place. Skimmers and boom were then deployed. The oil collection system on board the barge is designed to skim approximately 6,600 barrels an hour for the first 12 hours of a spill.

John Kotula of the DEC, who observed the drill, said that while the spill response crew performed well, Alyeska needs to improve its boom deployment and oily-water decanting procedures. Decanting is the process of releasing water into the sea after it separates from the skimmed oil. Proper decanting allows more room in the barge for recovered oil.

Falkner to replace O'Leary at RCAC

The Prince William Sound Regional Citizens' Advisory Council will hold its quarterly board meeting at the Anchorage Hilton Hotel on Thursday and Friday.

The public meeting runs from 9 a.m. to 4 p.m. each day. Agenda items include:

• Seating of Patience Falkner as a board representative from Cordova District Fishermen United to replace long-time representative Michelle Hahn O'Leary, who is resigning.

• Reports on several citizens' council projects and issues, including long-term environmental monitoring in Prince William Sound, aquatic nuisance species, iceberg detection, and requirements for double hulls and tankers calling at Valdez.

• Discussion of whether to move more RCAC staff to Valdez from Anchorage.

The RCAC is an independent, non-profit corporation whose mission is to promote environmentally safe operation of the Valdez oil terminal and associated tankers. The council's 18 member organizations are communities in the region affected by the 1989 Exxon Valdez oil spill, as well as aquaculture, commercial fishing, environmental, Native, recreation and tourism groups.

ANCHORAGE DAILY NEWS
DECEMBER 1, 1998

Sound studies at odds

New work puts Exxon on hook

By BEN SPIESS
Daily News reporter

A new study counters a long-held claim by Exxon that oil seeping from the ground is a natural part of the Prince William Sound environment. Discounting natural oil as a contaminant in the Sound, the new work suggests that signs of oil pollution in sea otters and ducks is due to the 1989 spill.

"It puts Exxon back on the hook," said Bob Spies, chief scientist for the Exxon Valdez Oil Spill Trustee Council, the group that funded the study.

The study is a step toward answering one of the big questions about Prince William Sound: Where have high levels of chemical compounds in the sea floor come from?

A scientific study funded by Exxon reported in 1996 that the compounds, known as hydrocarbons, come from natural oil seeps in the Gulf of Alaska. That study invited the idea that Prince William Sound had natural ability to process oil and that, perhaps, slight contamination in marine species was normal in the Sound.

But the new work by federal scientists in Juneau, which was published last month, finds that coal from the sprawling deposits on the Bering River is the source of hydrocarbons. Because coal hydrocarbons are not easily absorbed into the food chain, the work suggests that any contamination found today therefore comes from the 1989 spill.

The debate resurrects questions over the pollution caused by the 11 million-gallon Exxon Valdez spill, the biggest environmental disaster in Alaska's financially lucrative history of oil production. The new work also comes as scientists wrestle over what is causing persistent stress among marine animals. Sea otters and two species of ducks in western Prince William Sound have been found with an enzyme produced only when the animals are exposed to oil. What petroleum source could be responsible?

"By ruling out natural oil, it gives greater weight that these problems are linked to the Valdez spill rather than any other source," said Stan Senner, science coordinator with the spill trustee council.

Exxon referred questions to the authors of the 1996 study it funded. David Page, a chemistry professor at Bowdoin College in Maine,

SOUND: Reports at odds

Continued from Page A-1

and Paul Boehm, a geochemist in Cambridge, Mass., stand by their finding that thousands of tons of oil sweep into the Sound each year.

"Trying to find a signal of the spill today is like trying to tune in PBS from Mars," Page said. Too many potential oil sources — fishing boats, recreation, oil seeps and old spills — cloud the picture. Stress among marine animals could as easily be blamed on the warm summers of El Nino as on the spill, Page said.

But Jeff Short, author of the new study, said the amount of oil leaking into the ocean near Prince William Sound is negligible.

"Maybe one or two quarts a day. You could scrape more oil off a Wal-Mart parking lot than comes out of those seeps," said Short, a NOAA scientist in Juneau.

Besides this disagreement, both scientific teams accuse each other of faults in sampling and in the technique of identifying the source of hydrocarbons.

The focus of their argument is the Sound's seabed.

Following the 1989 spill, scientists found high levels of hydrocarbons in the seabed. Hydrocarbons are the building blocks of coal, oil and other fossil fuels. The findings sparked fears that spilled oil settled to the bottom of the Sound.

Page and Boehm traced the compounds to oil seeps in the Gulf of Alaska off Yakataga and to seeps at Katalla, about 200 miles east of the Sound. The structure or fingerprint of the hydrocarbons from the seeps matched the hydrocarbons from the sediments exactly, Boehm said. They saw no signs of coal in the river drainages and did no fingerprint tests.

"When you find the criminal whose fingerprints match perfectly, you don't go looking for other suspects," Boehm said.

Short said that ignoring coal was a mistake.

The Bering River area also holds a massive exposed bed of coal about 100 miles east of the Sound. Short said his work has identified the coal as having an exact fingerprint to the hydrocarbons in the Sound. Waves and wind moved coal sediment into the Sound.

"I trust the abilities of both scientists, but I'm convinced by the new study that coal is the likely source of the hydrocarbons," said Susan Saupe, science director at the Cook Inlet Regional Citizens Advisory Council. The council monitors oil shipping in Cook Inlet.

Bruce Wright, a National Marine Fisheries Service representative to the spill trustee council, said the study raises doubts about Exxon's claims that seep oil explains contamination in the Sound.

"It's just unbelievable that they are not backing off their story," Wright said. "This establishes coal as the source. Oil is a contaminant."

❑ Reporter Ben Spiess can be reached at bspiess@adn.com.

KOD DAILY MIRROR
DECEMBER 1, 1998

Scientist discounts impact of natural oil seeps in Prince William Sound

ANCHORAGE, Alaska (AP) — A new study runs counter to claims by Exxon that oil seeping from the ground is a natural part of the Prince William Sound environment.

The study suggests that signs of oil pollution in sea otters and ducks is because of the 1989 Exxon Valdez tanker spill.

"It puts Exxon back on the hook," said Bob Spies, chief scientist for the Exxon Valdez Oil Spill Trustee Council, the group that funded the study.

A scientific study funded by Exxon in 1996 reported that some hydrocarbons discovered on the sea floor come from natural oil seeps in the Gulf of Alaska. That study suggested that Prince William Sound has a natural ability to process oil and that a slight contamination in marine species might be normal there.

But the new work, by federal scientists in Juneau, finds that coal from large deposits on the Bering River is the source of the hydrocarbons.

Because coal hydrocarbons are not easily absorbed into the food chain, the data suggests that any contamination found today must come from the 1989 spill, the scientists said.

The debate resurrects questions over the pollution caused by the 11 million-gallon Exxon Valdez spill, the biggest environmental disaster in Alaska's financially lucrative history of oil production.

The new work also comes as scientists wrestle over what is causing persistent stress among marine animals.

Sea otters and two species of ducks in western Prince William Sound have been found with an enzyme produced only when exposed to oil.

"By ruling out natural oil, it gives greater weight that these problems are linked to the Valdez spill rather than any other source," said Stan Senner, science coordinator with the spill trustee council.

Exxon referred questions from the Anchorage Daily News to authors of the 1996 study it funded.

David Page, a chemistry professor at Bowdoin College in Maine, and Paul Boehm, a geochemist in Cambridge, Mass., stand by their finding that thousands of tons of oil sweep into the Sound each year.

"Trying to find a signal of the spill today is like trying to tune in PBS from Mars," Page said.

Too many potential oil sources — fishing boats, recreation, oil seeps and old spills — cloud the picture. Stress among marine animals could as easily be blamed on the warm summers of El Nino as on the spill, Page said.

But Jeff Short, author of the new study, said the amount of oil leaking into the ocean near Prince William Sound is negligible.

"Maybe one or two quarts a day. You could scrape more oil off a Wal-Mart parking lot than comes out of those seeps," said Short, a NOAA scientist in Juneau.

Voice of the citizens must be heard during oil-spill response

By JOHN S. DEVENS, Ph.D.
Executive Director

A major lesson of the Exxon Valdez tragedy is in danger of being ignored: Citizen involvement is critical in responding to a major oil spill.

For months now, we at the Prince William Sound Regional Citizens' Advisory Council have urged industry and government to guarantee us a non-voting advisory seat on the Unified Command, which is formed after an oil spill to manage the response. As executive director, I would normally fill that seat on the council's behalf.

But the members of the Unified Command — one person each from the U.S. Coast Guard, the Alaska Department of Environmental Conservation, and the oil industry — appear to be concerned that citizens may not understand their deliberations, and that we might engage in disruptive debates during high-stress decision-making sessions. The Coast Guard, whose decision it is to make, has so far turned us down.

To answer the citizens' need to provide and receive information at the Unified Command level, it has been suggested we use a member of the oil industry as a liaison or that we catch members of the Unified Command during breaks.

We don't consider either approach workable. We feel direct citizen input to the Unified Command is critical for its deliberations and a protocol can be developed for appropriate input by citizens.

We feel strongly that citizens have a right to know how decisions are made, and a right to respond to decisions affecting their lives. The people, as Alaska's open meetings law says, "do not give their public servants the right to decide what is good for the people to know and what is not good for them to know."

John Devens

Our reasons for wanting a seat go back to 1989, when the Exxon Valdez poured 11 million gallons of North Slope crude into Prince William Sound. Mayors and other community officials found it difficult to get into the information and decision-making loop.

This engendered mistrust by citizens, because they didn't know how the decisions were being made that so deeply affected their lives and livelihoods.

It also deprived Exxon Corp. and government agencies of information they could have used to combat the spill. With better citizen input, perhaps more oil could have been contained, lessening the damage to shorelines, fisheries, wildlife, countless careers and Exxon's bottom line.

With our network of member organizations and communities stretching from Prince William Sound to Kodiak to Lower Cook Inlet, we are ideally equipped to serve as the citizen voice on oil-spill issues. That is why we were formed after the Exxon Valdez spill.

In the event of a spill, we would activate our own Emergency Response Plan and could instantly become a region-wide high-speed link between affected citizens and response managers.

But at present, our role is so unclear under the state-federal oil spill response plan for Prince William Sound that it has become an ongoing subject of dispute between us and the Unified Command during drills and exercises.

The plan calls on us to serve as an information conduit, but is vague about how. It provides only that the council is "a resource for the Unified Command and participates in the regional MAC (Multi-Agency Coordinating Committee) when it is established and functioning for a spill response."

The plan fails to explain the council's exact role in a MAC and fails to provide for a council role if – as has been the case so far in drills and incidents – no MAC is established.

We want the plan modified to specify that the council *is* the MAC for spills in Prince William Sound and the Gulf of Alaska, and to guarantee us direct access to the Unified Command.

Only then will the citizens of our region be safe from the consequences of one of the oldest laws of human experience: Those who ignore history are doomed to repeat it.

THE OBSERVER
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Ten years later, symposiums will mark the Valdez oil spill of March 1989

Valdez and Anchorage will be the sites of symposiums to mark the 10th anniversary of the Exxon Valdez oil spill.

The Valdez symposium, scheduled for March 21-22, 1999, will focus primarily on improvements in oil-spill prevention. The Anchorage event, March 23-27, will focus primarily on efforts to repair the damage to the Prince William Sound environment from the March 24, 1989 spill.

The Valdez proceedings, called "Partners in Prevention – A Decade of Progress in Prince William Sound," will feature as keynote speakers Gov. Tony Knowles, U.S. Sen. Ted Stevens, and Bob Malone, president of Alyeska Pipeline Service Co.

The symposium is sponsored jointly by the City of Valdez, Prince William Sound Community College, Alaska Dept. of Environmental Conservation, the citizens' council, and Alyeska. Except for tours and demonstrations, it will take place at the Valdez Civic Center.

The schedule for Sunday, March 21, includes tours of the Coast Guard Vessel Traffic Center and Alyeska's Ship Escort/ Response Vessel System, panel discussions, and a banquet with Stevens speaking on the Oil Pollution Act of 1990.

Monday's events include the main panel of the symposiuum. Topics include tanker integrity and double hulls, human factors, ice detection and avoidance, tanker escorts, and other measures to reduce the risk of another oil spill. It will also include a question-and-answer session, and questions are being collected in writing between now and the symposium. To submit a question, fax it to 907-835-5926, email it to rcac@pobox.alaska.net, or mail it to the council's Valdez office.

After lunch, Alyeska will stage on-water demonstrations.

For information, contact the Prince William Sound Community College at 907-834-1640 or write PO Box 97, Valdez 99686.

The Anchorage symposium, titled "Legacy of an Oil Spill – 10 Years After Exxon Valdez," is sponsored by the Exxon Valdez Oil Spill Trustee Council. The first four days will consist of proceedings at the Egan Civic and Convention Center. The final day will see a field trip to Seward for a visit to the Alaska SeaLife Center and a gray whale tour.

For information, contact the Trustee Council's Tami Yockey at 907-278-8012 or write 645 G Street, Suite 401, Anchorage 99501-3451.

THE OBSERVER
DECEMBER 1998
VOL 8 NO 3

Exxon oil spill effects linger

■ *Alaska scientists challenge Exxon findings*

By SHANA LOSHBAUGH
THE PENINSULA CLARION

Crude oil residue remaining from the 1989 Exxon Valdez oil spill may still be hurting salmon in Prince William Sound, according to new findings by the National Marine Fisheries Service.

The studies conclude that oil spills, including small chronic leaks, damage fish and other marine wildlife more than previously believed.

Research conducted by scientists affiliated with the fisheries service's Auke Bay Laboratory may lead to stronger water quality standards, which could affect Alaska's oil industry.

The studies are being watched and debated by government and industry groups, including the Alaska Department of Environmental Conservation.

"If the science is solid, we would definitely consider changing the standards," said state water quality standards coordinator Katy McKerney.

The Exxon Valdez spilled 11 million gallons of North Slope crude in Prince William Sound on March 24, 1989. Funds from a $900 million settlement have

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Exxon...

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helped scientists study the spill and its ongoing impacts on coastal Alaska fish and wildlife.

The Exxon Valdez Oil Spill Trustee Council asked for new studies after pink salmon spawning in oiled intertidal areas failed to produce normal offspring years later. The council wanted to find out why recovery was so slow, said Stan Senner, trustee council science coordinator.

In the new studies, chemists and biologists concluded that some ingredients found in weathered Alaska North Slope crude oil are so poisonous that even the small amount left over from the Exxon spill damages salmon eggs and young fish.

Fisheries service researchers set up laboratory experiments to mimic what had happened in the sound, exposing eggs and fry to seawater percolated through gravel sprayed with oil.

Eggs hatched prematurely, and fry showed abnormally high birth defects, including stunted growth, twisted backbones, swollen egg sacs, deformed jaws and evidence of genetic mutations. Malformations resembled those seen in studies with dioxin, a dangerous industrial pollutant.

Before these findings, most scientists believed the volatile chemical fraction of crude oil that evaporates readily was the most toxic and that oil in the environment became less dangerous as it aged.

The new results suggest pockets of residual weathered oil from spills can cause localized problems for many years.

"This conclusion is controversial because it demonstrates a sensitivity to the toxic components of oil that is much greater than previously recognized," the Auke Bay scientists said in a written statement.

The studies, presented at a fisheries symposium in Anchorage last month, were immediately rejected by Exxon scientists.

Company spokesman Al Maki attributed the new findings to statistical artifacts. Another scientist working for the oil company said the salmon fry in the study were damaged by clumsy handling rather than oil.

But the researchers repeated the experiment three times and got the same results with a high level of statistical significance, said Jeff Short of the fisheries service. Similar results with tests on herring backed up the findings.

"Exxon has challenged these conclusions with data presented in one publication. The trustee conclusions are based on seven different publications involving 17 independent researchers representing five different agencies, including Exxon," fisheries service researchers wrote.

Part of the debate over long-term impacts of Exxon Valdez oil stems from disagreements over how clean Prince William Sound was before the 1989 spill.

Studies Exxon funded suggest spilled crude degraded and diluted quickly and got lost in the chemical background of natural hydrocarbons, including oil that seeps into the environment. Fisheries service researchers said Exxon greatly overestimated the amount of oil from natural seeps or confused it with naturally occurring coal particles.

The new information might help explain why some animals in Prince William Sound are still having trouble nine years after the spill. When petroleum gets in the food chain it changes, so scientists can't fingerprint oil toxins in animals.

"We continue to see biochemical evidence of exposure to hydrocarbons in samples such as sea otter blood," said Senner of the oil spill trustees' office.

Background oil from seeps could explain that, offering Exxon a biochemical alibi against accusations of long-term effects. But if the natural hydrocarbons in the sound do come from coal, which does not make it into the food chain, the evidence would suggest long-term pollution from the spill.

The studies of toxic effects on fish may have implications for the oil industry beyond efforts to prevent tanker spills.

Alaska has strict standards for the petroleum compounds of the highest concern, but the new studies imply they don't offer enough protection to sustain fish and shellfish for future generations, Short said.

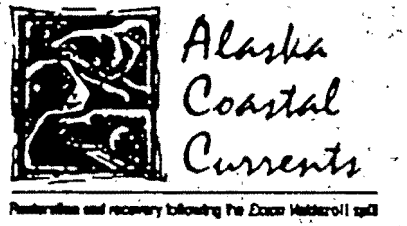
Tougher standards could affect industry activities such as discharge permits, ballast water treatment and offshore oil platforms.

"We think it (the standards) will probably have to be lowered by a factor of 100 or 1,000," he said.

Researchers try to find key to kittiwake survival

Editor's note: It has been eight years since the Exxon Valdez ran aground in Prince William Sound, spilling nearly 11 million gallons of Alaska crude oil. Time has since told quite a lot about the spill's long-term effects. To help tell the story, the Exxon Valdez Oil Spill Trustee Council is providing this column focusing on the ongoing recovery within the spill region.

By JODY SEITZ



ICY BAY — One day in early August I had the opportunity to join researchers at a remote kittiwake colony in Prince William Sound.

My host, Rob Suryan of the U.S. Fish and Wildlife Service, was bringing some of his crew to help with the work at bird colonies in the southwestern sound.

As we approached the head of an arm of Icy Bay, a swarm of kittiwakes circled and floated in front of a great rock cliff. The smell of digested fish and the throb of their cries, "Kittiwake! Kittiwake!" filled the air. All over the cliff, tufts of grass spilled over ledges cradling the young, still flightless chicks.

Kristin Mosher and Teresa Sauer have spent the summer out here, monitoring the progress of the chicks as they developed, checking their size and their diets as the summer passed. They hope to be able one day to explain why some chicks thrive and others do not.

"The chicks we measure, some are nice and big and fat and healthy, some are just not growing," said Sauer. "They're just scrawny. And we're not sure whether or not food differences account for that difference. You have a nice big chick that looks real healthy and right in the next nest, one that looks terribly skinny."

I watched Mosher and Sauer weigh and measure, and, as they delicately put it, "barf" the birds. They want to know what the birds are eating, so they make them vomit their prey. The stomach contents are then studied to identify the prey it contains.

The kittiwakes seem pretty resistant to this invasion. While other parents might leave their chicks after such treatment, kittiwake parents don't appear bothered by it. "The parents are really accepting of us taking the chicks, going off with them, and bringing them back," said Sauer. "It's very unusual I would say."

This summer they've monitored the contents of 190 nests and measured chick growth in 60 nests. Unfortunately, they've lost half of the chicks they started with.

Many chicks don't make it, explains Sauer. "The storms we have here wipe out some nests, and there's a lot of predation here. Peregrine falcons and ravens make use of the chicks and the eggs, too. Ravens are good egg catchers. We had some mink visit our colony early in the season. And we've seen river otter. There's also siblicide — the bigger stronger chick pushing the smaller sibling out of the nest, either as an egg or as a chick." Siblicide is a sign that the chicks are not getting enough food.

We motored our boat over to the cliff face, under a light waterfall to capture a chick for measuring. The nest was empty. I asked if the peregrine falcon pair had been by today. "They come every day, a male and a female," Sauer said. "Well, they have chicks their own somewhere they're trying to feed.'

Mosher and Sauer are also banding the birds so they can be identified by the year they were banded, the colony they were banded at, and a special combination so they can identify individual birds in the future.

Sauer has been working at this colony for four years, giving her a chance to see nestlings return as adults. "Kittiwakes first breed at four to five years old," she said. "We won't see many of them again in Prince William Sound all that time, so it's pretty exciting when they come back."

Jody Seitz lives in Cordova and also produces the Alaska Coastal Currents radio program.

NOVEMBER 29, 1998

ANCHORAGE DAILY NEWS
NOVEMBER 28, 1998
LETTER TO THE EDITOR

Everything's not OK in fishery

Laine Welch's column (Business, Nov. 22), although she was just reporting the National Marine Fisheries Service's report to Congress on the state of the fisheries in the Bering Sea and Gulf of Alaska, reminded me of the optimist who fell off a 12-story building and said, as he passed the ninth floor, "Everything's OK so far!"

In this case, the pollock fishers have harvested about 1 million metric tons per year for the past 12 to 13 years. When this began, the total pollock resource was estimated to be about 15 million tons; now it is estimated to be less than 6 million tons. This decrease has been more or less constant.

In a so-called renewable resource, why is this happening?

It couldn't be overfishing, unless the fishers are "high-grading" their catch and disposing of nondesirable fish. It couldn't be habitat destruction, because everyone knows pollock trawlers don't drag the bottom! But, according to the NMFS report, everything is OK so far!

Then there is a suggestion that the feds need industry gathered data as a part of a collaborative effort to better evaluate the health of the fishery. On the surface, this sounds good because one would hope the pollock fishers would want a sustainable, productive fishery for the long term. Well, other fishers seemingly didn't in the East Coast cod, swordfish and striped bass fisheries, nor did they in the West Coast anchovy or sardine fisheries.

I have written to Gov. Knowles, the Alaska congressional delegation and the Alaska legislative leaders on this subject; the result — absolute silence (or "pablum"), except for Sen. Stevens and Senate Bill S1221.

If nothing is done to arrest this unexplained resource decrease, the pollock fisheries have only a few years remaining. But the NMFS has reported "everything is OK so far!" A definitive evaluation of this situation is long overdue and immediate action is needed to ensure renewal of this fishery if it is to survive.

— Richard Hahn
Soldotna

KODIAK DAILY MIRROR
NOVEM 27, 1998

Alaska gets temporary Interior assistant

ANCHORAGE (AP) — Interior Secretary Bruce Babbitt has tapped Native rights lawyer Bob Anderson to fill in temporarily as his special assistant for Alaska issues.

Anderson, who serves as Babbitt's counselor on Northwest issues in Seattle, said he will begin commuting to Anchorage next week to act as interim special assistant while Babbitt finds a replacement for Deborah Williams, who will leave early in December.

The Alaska special assistant coordinates the work of the Bureau of Land Management, the National Park Service and the U.S. Fish and Wildlife Service in Alaska and is the secretary's chief policy adviser on Alaska issues.

A search is under way for Williams' successor and Babbitt hopes to have the position filled before Congress returns to work in January, said Interior Department spokeswoman Stephanie Hanna.

K K DAILY MIRROR
N BER 27, 1998

Russian joins sea lion team

SEWARD (AP) — A leading Russian scientist is joining the team at the Alaska SeaLife Center researching the decline of the Steller sea lion.

Vladimir N. Burkanov, a marine mammal specialist from Kamchatka, is due to arrive in Seward early next month.

The center has received money from the National Fish and Wildlife Foundation to study problems the animals, whose population has dropped dramatically over part of its range.

The western stock of the sea lions was declared endangered in 1997 after its population declined precipitously. Regulators have restricted fisheries near breeding colonies in attempts to protect the animals, and are considering further restrictions on the pollock fishery in the Bering Sea.

Don Caulkins, the center's senior mammalogist, is directing the research program, which aims to discover why Stellers are dying off and what type of management can help them recover.

Group feeds Kenai Refuge passion

By SHANA LOSHBAUGH
Peninsula Clarion

KENAI — The Kenai National Wildlife Refuge will be reaching out to the public through a new nonprofit support group.

Volunteers have been meeting informally this fall to organize the effort. It's not yet officially named or incorporated, but participants have been referring to it as Friends of the KNWR.

The group's mission will be to conserve the unique natural, cultural and recreational values of the refuge and to promote awareness of its importance to nearby communities.

"We're not just the feds on the hill," said Amy George, the refuge employee who serves as the staff liaison to the fledgling group.

Those involved — a diverse group of retirees, educators and environmentalists — have volunteered for refuge projects in the past. The refuge staff invited them to get together to discuss expanding and formalizing their activities.

Uniting them is a passion for what retired wilderness guide George Pollard of Kasilof called "the greatest piece of ground in North America," and a concern for its future.

After they set up a board, bylaws and incorporation documents, they plan to start a membership drive next year.

The group is considering several projects: a public relations campaign, water-quality monitoring, improving and expanding trails, obtaining new and larger visitors' facilities; better signs, more naturalist programs, combating litter and vandalism, protecting refuge lands from development pressures, increasing lawmakers' appreciation of the refuge and helping wildlife through habitat preservation, rehabilitation and research.

The Kenai National Wildlife Refuge originally was established in 1941 under the name Kenai National Moose Range.

Since then, it has shifted boundaries, reorganized and become part of the refuge system.

CLARION PENINSULA
NOVMEBER 27, 1998

Spill funds buy more Kenai land

By DOUG LOSHBAUGH
Peninsula Clarion

Gov. Tony Knowles has approved the purchase of 76 more acres along the Kenai River using money from the Exxon Valdez Oil Spill Trustee Council.

The purchase, which was announced earlier this week, brings the trustees' total Kenai River acquisitions to 2,658 acres, at a total cost of $8.3 million. The purchases protect roughly nine miles of riverbank from development that could harm salmon and trout. The trustee council also has dedicated roughly $2 million to restore the publicly owned riverbank that suffers erosion from heavy use by sport fishers.

Spokesman Joe Hunt said the trustee council used $450,000 from the $900 million civil settlement after the Exxon Valdez oil spill to buy the 76-acre Patson parcel. The land lies along Funny River Road near the city of Soldotna road maintenance yard. Hunt said the primary value of the purchase is protecting the riverbank from development.

The Patson land includes about a third of a mile of riverbank. There has been little development there, Hunt said, and because it has been

See LAND, back page

...Land

Continued from page A-1

privately owned, there has been little trampling or habitat damage. The land is flat, and mostly dry. Without the trustee council purchase, he said, it might have been subdivided and developed.

Following the purchase, he said, the state will own it. The state Department of Fish and Game and Division of State Parks will manage it to protect habitat and provide compatible recreation.

Gary Liepitz, a Fish and Game habitat biologist with the Kenai River Center in Soldotna, said the state will preserve the Patson parcel, and most others acquired to protect Kenai River habitat, in the natural state. There will be no boardwalks, stairs or other development, he said, except on a few parcels managed for intense public use.

On parcels managed for habitat, the state does intend to promote recreation, he said, and in general, it will allow fishing. To avoid trampling and damage to vegetation, he said, it will encourage anglers to fish from boats or by wading in the river. If managers see trampling and habitat damage, he said, they may close fishing in the affected area to allow recovery.

Suzanne Fistler, Parks' permit coordinator at the river center, said the intent is to incorporate trustee council purchases along the river into the Kenai River Special Management Area (KRSMA), which is managed by Parks. She said Parks expects introduction of a bill in the Legislature to do that. However, the Department of Natural Resources can add small parcels to KRSMA through administrative action, she said.

Hunt said the trustee council reserved $392 million from the $900 million settlement for habitat protection and acquisition. On Tuesday, Knowles also approved the trustee council's purchase of 41,750 acres on Afognak Island. Of that land, 36,230 acres, mostly adjacent to Afognak Island State Park, goes to the state. Some 5,308 acres plus 212 acres of timber easements go to Kodiak National Wildlife Refuge and to Alaska Maritime National Wildlife Refuge.

The Afognak and Patson purchases nearly deplete the $392 million, Hunt said. The only major purchase still in the works is of 55,000 acres around the Karluk River on Kodiak Island.

Alaska Coastal Currents

By Jody Seitz

Even a good year can be tough on seabirds

When Evelyn Brown began studying juvenile herring at the University of Alaska Fairbanks she was hoping to develop another tool to help fish managers predict herring returns in Prince William Sound.

Three field seasons later, she not only has helped develop a deeper understanding of herring, but also about other species of fish important to seabirds.

Prior to Exxon Valdez oil spill studies, scientists knew close to nothing about tiny forage fishes, such as sand lance, capelin, hooligan (eulachon), or juvenile herring. This made it impossible to understand how the oil spill impacted their populations or affected the seabirds that preyed on them. In addition to the spill, there also were natural factors affecting their populations. Some seabird populations that depend on these fish for food have declined over the last 20 years, possibly due to a major ecosystem shift that changed their food supplies.

To find out how successful birds are at foraging for food, researchers have been mapping the distribution and abundance of these fishes using hydroacoustics and an underwater video camera. They found schools of forage fish, but saw few birds feeding on them.

Brown took a more aerial approach. The underwater surveys were too deep, she said. "It's pretty simple," Brown said. "Basically I'm flying in an airplane so I'm seeing what birds see and they seem to be visual predators. Seeing subsurface and seeing other birds feeding is a really important cue to them."

Brown conducts daily surveys of the sound over the course of the summer using an airplane with a GPS (Global Positioning System) coded video camera mounted inside. Between the acoustic surveys and the aerial surveys, researchers have found out a lot more about forage fishes.

"There are places in the sound where these fish occur year after year after year," Brown said. "If you look for them you can see shelves where there's good ocean circulation and eddy formation. And hooligan seem to be feeding on these shelves." Accurately identifying a school from the air can be tricky.

Brown developed her aerial survey with advice from spotter pilots and techniques learned from her days as a fisheries biologist at the Alaska Department of Fish and Game. Over the past three summers she's worked with catcher boats to verify the schools she was seeing from the air.

She says the surveys can be accurate for age-one herring, but that it can be difficult to tell the subtle difference between schools of age-zero herring and age-zero sand lance. With capelin, hooligan, and age-one herring there's very little error — less than 10 percent, she said.

Brown has documented basic information for these forage fish species, especially for sand lance, which are difficult to assess other than by aerial survey. "We knew sand lance were abundant and played an import role in the ecosystem but we really didn't have any idea of how widely distributed they are or what kind of population shifts take place."

These studies represent the first data on these four species in the northern Gulf of Alaska. Though researchers have seen increases in all these species since 1995, it's still too early to say if this represents a trend in the Gulf of Alaska.

Jody Seitz lives in Cordova and also produces the Alaska Coastal Currents radio program. The series is sponsored by the Exxon Valdez Oil Spill Trustee Council to provide information about restoration activities within the spill region.

THE SEWARD PHOENIX LOG
NOVEMBER 26, 1998

Russian scientist to work on Steller sea lion project

Dr. Vladimir N.. Burkanov from Russia will arrive at the SeaLife Center the first week in December to conduct scientific research in conjunction with the ongoing Steller sea lion research project at our facility. He will move here with his wife, Valentina, and their two teenage sons, Nickolay and Yurity.

The SeaLife Scoop

Compiled by Maureen Sims

The SeaLife Center has recently initiated a series of research projects involving the study of Steller sea lions funded by grants from the National Fish and Wildlife Foundation. Directed by the center's senior mammalogist, Don Caulkins, the program is designed to determine the cause of the decline in the Steller's western range and to design scientific management strategies to enhance the marine mammal's recovery.

Burkanov is currently the chief of marine mammal services of Kamchatrybvod, Committee of Fisheries of Russia, and a senior scientist at the Kamchatka Institute of Ecology and Nature Management at the Russian Academy of Sciences. He has been offered a temporary position through the end of 1999 as project co-leader for the Steller sea lion research project at the SeaLife Center.

First listed in 1991 as a threatened species under the U.S. Endangered Species Act, the western stocks of Stellers were put on the endangered list in 1997. Since the 1991 creation of the Steller Sea Lion Recovery Team, there has been work to develop both research goals and management techniques to promote the long-term recovery of Steller sea lions. The SeaLife Center is undertaking some of the research recommended by the recovery team.

Burkanov has developed an expertise in the life history, ecology and population dynamics of the Steller sea lion of the northwest Pacific Ocean. In addition, he is considered an expert in the ecology and biology of other North Pacific marine mammal species, including sea otters, harbor seals and walruses. He is considered one of the foremost marine mammal specialists in the Kamchatka region and conducted the first study of rookeries and haul-out

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Scoop ...

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sites for marine mammals around the Kamchatka Peninsula.

His groundbreaking work continued as he established marine mammal monitoring stations, which ultimately resulted in data that provided the basis for an administrative order protecting marine mammal habitats on the Kamchatka Peninsula.

Burkanov previously headed the Laboratory of Higher Vertebrates of Kamchatka Institute and has been a senior specialist at the Ministry of Fishery for the Soviet Union.

The Russian scientist has been published extensively in the field of marine mammal biology in the Bering Sea area, and has collaborated with a variety of international and U.S. scientists on marine mammal research. He has a Ph.D. in morphology and ecology from the Russian Academy of Sciences and a master's degree in biology from Kirov Agricultural Institute.

Maureen Sims is coordinator of external affairs at the Alaska SeaLife Center.

THE SEWARD PHOENIX LOG
NOVEMBER 26, 1998

SeaLife Center asks public to Appreciation Evening

The SeaLife Center is laying out a table of tasty treats for the public to enjoy this Friday, Nov. 27 when they host an Old-Fashioned Holiday Kickoff and Seward Appreciation Evening. There will be no admittance fee to Seward residents for this special event from 5-7:30 p.m., which will feature music, cider, hot chocolate and Christmas cookies for the community.

According to Maureen Sims, coordinator for external affairs, the SeaLife Center will have a tree in the main lobby and they invite members of the public to bring an ornament to put on the tree.

On Saturday the SeaLife Center hosts performances by the musical duo, Good Dog. There will be a children's concert from 11-11:45 a.m. and then from 1-3 p.m. the pair will play contemporary folk and pop music. There is no charge for entrance to the performance, but normal SeaLife Center fees apply for admission to the rest of the building.

The SeaLife Center is allowing students from local schools an opportunity to enter the Seward holiday decorating contest with displays at the SeaLife Center. This will provide an opportunity for school groups to win up to $250 through the city's contest, according to Sims.

She also reminds the public of the canned food drive going on now through Nov. 30. The SeaLife Center offers reduce price admission of $10 per adult and $8 per children with a donation of two cans of people or animal food. In turn, the marine facility will donate the people food to the food banks at the Salvation Army and Seward Seaman's Mission and the animal food to Seward Animal Shelter.

ANCHORAGE DAILY NEWS
NOVEMBER 26, 1998

Russian joins sea lion research team

SEWARD — A leading Russian scientist is joining the team at the Alaska SeaLife Center researching the decline of the Steller sea lion. Vladimir N. Burkanov, a marine mammal specialist from Kamchatka, is due to arrive in Seward early next month. The center has received money from the National Fish and Wildlife Foundation to study problems of the animals, whose population has dropped dramatically over part of its range. The western stock of the sea lions was declared endangered in 1997 after its population declined precipitously. Regulators have restricted fisheries near breeding colonies in attempts to protect the animals, and are considering further restrictions on the pollock fishery in the Bering Sea. Don Caulkins, the center's senior mammalogist, is directing

Point of View

HOMER NEWS NOVEMBER 26, 1998

Local streams need state's attention to remain productive

by Larry Smith

Give thanks that the Board of Fisheries blew through Homer without doing even more damage. Although the peace and dignity of the Kachemak Bay personal use salmon fishermen has been disturbed, it can be all for the best — but only if it leads to determining harvestable surpluses based on sound science.

The board chopped the allowable catch for personal use setnets, and left us to solve the sustained yield problems — problems caused by the failure to do basic work about wild salmon.

Appropriate harvest of wild stocks requires determining several things, including escapement levels for streams in the Kachemak Bay drainage, the condition and capacity of available habitat, enforcement of sport, commercial and personal use regulations, and calculating the level of sport catches, both guided and local. Catches in personal use and commercial operations already must be reported.

Fortunately, around here it is well-known that many commercial and sport fishermen share their catch around the community. How a fish was caught does not change its value at suppertime.

The strategic problem is the allocation of state fishery management resources. Time and money are naturally (if not always prudently) focused on systems where there are more fish, more fishermen and more money at stake. Last year, I was appointed to the state's Sustainable Salmon Fisheries Project. I know that small salmon streams statewide have been increasingly neglected in an era when the Department of Fish and Game budget has spiraled downward. The Sustainable Fisheries Project is designed to identify and correct shortfalls in policy and management. The inability to do stock and habitat assessment are at the top of the list.

"ADF&G recognizes a void in coho studies, particularly regarding escapement in Kachemak Bay," wrote the Division of Commercial Fish in 1981. That void has not been filled, and applies to all salmon and to resident fish such as Dolly Varden as well.

The Alaska Constitution mandates that "fish ... shall be utilized, developed and maintained on the sustained yield principle ...." It is no longer clear that our management system is making progress toward that goal. Local biologists often fight valiant but losing battles within their agency for permission to do assessments. At regional and headquarters offices, decisions on budget and program reductions are a way of life. Even put-and-take stocking programs aimed at tourism are in trouble. Habitat where carrying capacity has not been reached could be developed with only four or five years of stocking which, if then protected from damage, could produce optimum sustained runs. Enhancement choices are increasingly limited; we may need to take better advantage of opportunities to maximize native habitat as a more cost-effective way to produce fish for all uses.

We can dine together on these salmon or be dined on separately by the Board of Fisheries.

Wild salmon in our watershed are harvested by all user groups, but allocation disputes have been generally avoided because of mutual respect and the tradition of working together that we have inherited from early residents. Although our peaceful sharing of the salmon resource has long set a good example, even we might fall to quarreling when seasons, bag limits and areas are reduced, as they will increasingly be for all users, a "precautionary principle" (which we used to call "e... on the side of conservation") adopted by the Board of Fisheries is, quite appropriately, applied: without good information catches must be reduced.

I believe that the reasonable allocation battle is for a share of stock and habitat assessment dollars for our neglected fisheries. Our united user groups can once again provide an example of cooperation and we can help to develop ways to maintain the salmon resource that can be applied around the state. Resources we are unquestionable rich in are: the network of knowledgeable citizens; the protected areas around the Bay in parks, refuges, and critical habitat areas; and the availability of technical and scientific staff in the resource agencies. If we cannot put together a sound wild stock management program in the Kachemak Bay drainage, how can we hope to do it for remote areas?

We can dine together on these salmon or be din... separately by the Board of Fisheries. In a little dif... context, Capt. Aubrey remarked: "They are decent creatures in themselves, but considered [as a board] they are an infernal hell-fire nuisance....". The board and agency spirit is willing, but the flesh is weak. Their temptation to spend the time and money on bigger, sexier systems like the Kenai River is nigh on irresistible but, with a little guidance, we should be able to get them to do their homework, starting right here around the Bay. We can put some flesh on the spirit. Full use of fishery resources is based on sound conservation.

Happy Thanksgiving.

Larry Smith is a longtime Homer resident and personal use fisherman.

State receives multiple oil exploration proposals for Copper River Basin

By Jennifer L. Strange
The Cordova Times

More than one competitive proposal for Copper River Basin oil exploration licenses have been received by the State of Alaska's Division of Oil and Gas.

Because less than 20 percent of the remote basin areas have ever been leased, and no production has resulted, the Alaska Department of Natural Resources implemented a new tactic called Exploration Licensing.

The Copper River Basin was opened up by the Department of Natural Resources — which oversees the Division of Oil and Gas — as an alternative to offering lands in Cook Inlet, said an Oct. 9 comment by Division of Oil and Gas director Ken Boyd.

"We have more than one proposal that aren't identical and that cover different areas," said Jim Hansen, Division of Oil and Gas lease sales manager.

As per Division of Oil and Gas policy, the division will send out a call for public comments and will then determine if it's in the state's "best interest" to license the exploration proposals.

All the proposals are kept confidential, from the public and from other competitors.

"We can't let them know who their competition is because that might determine the amount they would bid and could affect what they intend to do," Hansen said.

Officials at the Division of Oil and Gas are talking about having the preliminary license findings done around fall of 1999, Hansen said.

"It would be the year 2000 before the licenses can be issued," Hansen said.

Zeine appointed to advisory group

Cordova Mayor Ed Zeine received a letter from U.S. Secretary of the Interior Bruce Babbit on Nov. 18, appointing Zeine to the Exxon Valdez Oil Spill Public Advisory Group. Babbitt's appointment was made on behalf of the State and Federal Trustees for the Exxon-Valdez Oil Spill.

The Public Advisory Group is set up to advise the Trustee Council in Alaska on matters involving use of the oil spill settlement funds and implementation of the joint State/Federal restoration program. Specifically, the Public Advisory Group is to provide advice on all decisions relating to injury assessment, restoration activities or other uses of the natural resources damage recoveries.

Area update

PWS Science Review Team drafts science plan

The Sound Science Review Team, in the spirit of the Prince William Sound Fisheries Ecosystem Research Planning group, began drafting a science plan that could help answer some pressing research questions about Sound fisheries. The group met in Cordova on Nov. 17.

Straying hatchery pink salmon was at the top of the review team's agenda. Sound fishermen have long supported research that studies the effects straying salmon — wild and hatchery — has on wild stocks.

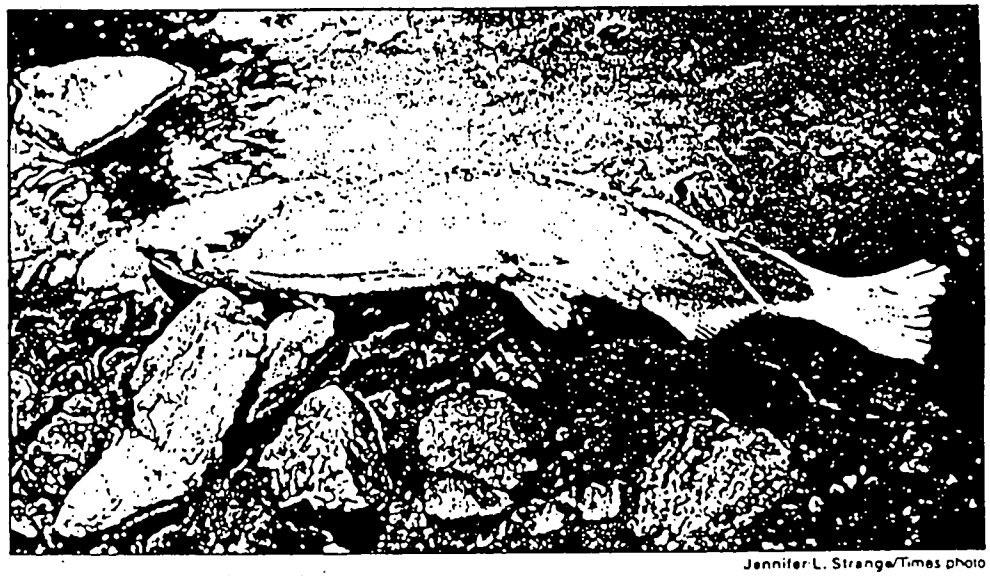
Representatives from Cordova District Fishermen United, United Salmon Association, PWS Aquaculture Corp., the Cordova and Anchorage offices of the Alaska Department of Fish and Game, the Oil Spill Recovery Institute and the University of Alaska Fairbanks helped hammer out an initial direction for the group.

"This is a chance for the public to get involved," said Tim Joyce, representative from the Regional Planning Team and the Cordova office of Fish and Game. "Here's their chance to give input into the research needed for their fishery."

Joyce was selected chairman by the group at the meeting.

The review team will next meet in Cordova on Monday, Nov. 30, 9:30 a.m. Call (907)424-7417 on Nov. 25 or Nov. 27 for location.

Fresh frozen



Jennifer L. Strange/Times photo

The last of this year's coho salmon can be observed in the streams and ponds around Fleming Spit. Some are mutated and spawned out, struggling to make it upstream, others are in various states of final repose (above) and still others are spry and chipper. "We saw a couple fresh ones swimming around in the pond pretty vigorously," said Alaska Department of Fish and Game biologist Dan Sharp on Sunday. "I'd give 'em another two weeks or so."

Alaska SeaLife Center hires Russian expert

By SHANA LOSHBAUGH
Peninsula Clarion

The Alaska SeaLife Center has invited a leading Russian scientist to join its team researching the decline of the Steller sea lion. Vladimir N. Burkanov, a marine mammal specialist from Kamchatka, is due to arrive in Seward early in December.

The center has received funding from the National Fish and Wildlife Foundation to study problems with the animals.

The western stock of sea lions was declared endangered in 1997 after its population declined precipitously in the North Pacific. Regulators have restricted fisheries near breeding colonies in attempts to protect the animals.

Don Caulkins, the center's senior mammalogist, is directing the research program, which aims to discover why Stellers are dying off and what type of management can help them recover.

Burkanov has collaborated on international science projects, published numerous studies of wildlife and earned a reputation as an expert on sea lions, sea otters, harbor seals and walruses. He was the first to monitor marine mammal rookeries and haul-out sites around the Kamchatka Peninsula in the Russian Far East.

He holds a doctoral degree in morphology and ecology from the Russian Academy of Sciences. He is currently the chief of marine mammal services of the Kamchatka Committee of Fisheries of Russia and a senior scientist at the Kamchatka Institute of Ecology and Nature Management at the Russian Academy of Sciences.

Burkanov will live in Seward with his wife, Valentina, and two sons. His post is a temporary appointment through the end of 1999 as project co-leader for the Steller Sea Lion Research Project.

The Alaska SeaLife Center, which officially opened in May, is one of the few facilities in the world set up to study adult Steller sea li[ons] in captivity.

THE CLARION PENINSULA
NOVEMBER 25, 1998

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C ION PENINSULA
NOVEMBER 25, 1998

ANCHORAGE DAILY NEWS
NOVEMBER 25, 1998

Put bite on Exxon

Nearly 10 years after the Exxon Valdez ran aground on Bligh Reef, Alaska families are still being victimized by Exxon. The continued nonpayment of Exxon's debt is a public scandal that impacts every citizen of this state, not just the victims in Prince William Sound.

What would the injection of $5 billion tax-free dollars do to the Alaska economy? The short answer is that it would create a tremendous and badly needed statewide boom in large and small business investments, home building and tax base. It would mean more and better-paying jobs, rural community development and increased opportunities for everyone.

Motivating Exxon to give up its delaying tactics and pay its debt to the people of this state involves motivating our politicians to view settlement as a political and economic priority for all of us. It's not going to bring back Prince William Sound, but settlement of the Exxon suit will go a long way toward building a new future for thousands of Alaskans statewide. If you're tired of waiting for justice to be done, make 1999 the year your representatives in the Legislature hear from you. The Alaska Legislature can and should put the bite on Exxon. We've all waited long enough.

— Anna von Reitz
Big Lake

THE VALDEZ VANGUARD
NOVEMBER 25, 1998

Sound maps to be updated

The Associated Press

Maps showing biological sensitivity and other data about shorelines along Prince William Sound will be updated in a yearlong project led by the National Oceanic and Atmospheric Administration.

The information could be used in responding to oil spills, NOAA said, adding that existing maps are more than 15 years old.

Maps will be updated with information gleaned from studies made since the 1989 Exxon Valdez oil spill. The state is providing $27,900 for the project, which is also supported by the Exxon Valdez Oil Spill Trustee Council, the Oil Spill Recovery Institute, the Coast Guard and the Prince William Sound Regional Citizens' Advisory Council.

Knowles approves oil spill trustee land purchases

ANCHORAGE (AP) — Gov. Tony Knowles on Tuesday approved two land purchases by the panel that administers state and federal settlement money from the Exxon Valdez oil spill.

The purchases by the Exxon Valdez Oil Spill Trustee Council include $70.5 million for 41,750 acres on Afognak Island and $450,000 for 76 acres along the Kenai River in Soldotna.

The Afognak purchase is aimed at protecting old-growth forest, salmon streams and river estuaries, while the purchase of nearly 2,000 feet of Kenai River frontage is intended to protect a portion of that popular salmon-fishing area.

"Protection of these rich habitat areas benefits all Alaskans by helping to maintain strong fish and wildlife populations while at the same time supporting recreational uses and traditional subsistence activities," Knowles said in a news release.

No state money will be used for the purchase, the governor's office said, but Knowles' approval was needed because the spill settlement funds are passed through the state's hands.

The Afognak acreage is adjacent to Afognak State Park and the Kodiak National Wildlife Refuge. The governor's office said the plan is for 6,200 acres to become part of the federal refuge and the rest to be incorporated into the state park.

It is seen as key breeding habitat for seals, sea otters, seabirds and fish. It's also a popular area for hunting, fishing and kayaking.

The Afognak land was bought from the Afognak Joint Venture, a partnership of several Native corporations. The partnership had been planning to do extensive logging on the land, but now will only cut timber in certain areas.

Howard Valley, chairman of the joint venture, said the partners will also be looking at recreation and ecotourism as ways to make money from its remaining land adjacent to the purchased parcel.

"In this way we plan to provide a long-term financial base for our partners, our communities and future generations," Valley said.

The Kenai River purchase brings to 2,658 acres the amount of land along the river bought with spill funds. That land cost $8.3 million and includes nine miles of riverfront.

ANCHORAGE DAILY NEWS
NOVEMBER 24, 1998

State stands with Interior in NPR-A suit

The Associated Press

The Knowles administration said Monday it wants to join with the federal government in fighting a lawsuit from environmental groups that seeks to block oil and gas exploration in the National Petroleum Reserve-Alaska.

Several environmental groups sued the U.S. Department of the Interior in federal court last month, claiming its decision to open 4 million acres of NPR-A was based on a flawed analysis of the move's impact on the environment.

The state's motion to intervene on the federal government's side also includes a request to move the case from Washington, D.C., to a federal court in Anchorage.

Knowles said in a news release that federal officials reached their decision to open NPR-A after an open process and by using sound science.

He also said the case's outcome could significantly affect Alaska's finances. The state, which gets about 80 percent of its revenues from oil, stands to collect half of all royalties in NPR-A, as well as severance, income and property taxes from development.

The suit, which also names Interior Secretary Bruce Babbitt and the Bureau of Land Management as defendants, was brought by the Wilderness Society, the Natural Resources Defense Council, Greenpeace, the Sierra Club, Defenders of Wildlife, the Alaska Wilderness League, the Alaska Center for the Environment and the Northern Alaska Environmental Forum.

The suit says the environmental impact statement fails to provide permanent protections for many of the areas where exploration and drilling are currently prohibited and doesn't discuss the potential impacts of oil work and related activities on the environment. The suit also says the impact statement doesn't consider a wide enough range of potential oil spills that could ensue with development.

Support network in works for refuge

By SHANA LOSHBAUGH
Peninsula Clarion

The Kenai National Wildlife Refuge will be reaching out to the public through a new group of refuge friends.

Volunteers have been meeting informally this fall to organize a new nonprofit support group. It's not yet officially named or incorporated, but participants have been referring to it as Friends of the KNWR.

The group's mission will be to conserve the unique natural, cultural and recreational values of the refuge and to promote awareness of its importance to the surrounding communities.

"We're not just the feds on the hill," said Amy George, the refuge employee who serves as the staff liaison to the fledgling group and is helping to get it going.

The Friends group will serve as a bridge between the refuge staff and the general public and as an advocacy body to promote the refuge's welfare through education, lobbying and fund raising.

Those involved have volunteered for refuge projects in the past; the refuge staff invited them to get together to discuss expanding and formalizing their activities. They are a diverse group of retirees, educators and environmentalists.

Uniting them is a passion for what retired wilderness guide George Pollard of Kasilof called "the greatest piece of ground in North America" and a concern for its future.

After they set up a board, bylaws and incorporation documents, they plan to start a membership drive in 1999.

Letting the public know what the refuge has to offer and what threatens it are priorities, as determined at preliminary brainstorming sessions.

Suggested projects the Friends may tackle include:

See REFUGE, back page

...Refuge

Continued from page A-1

undertaking a public relations campaign; water quality monitoring; improving and expanding trails; obtaining new and larger visitors' center facilities; improving signs; increasing the number of interpretive naturalist programs; combating litter and vandalism; conducting educational outreach; protecting refuge lands from development pressures; increasing lawmakers' appreciation of the refuge's value; and helping wildlife through habitat preservation, rehabilitation and research.

The KNWR occupies what refuge manager Robin West called "the heart of the Kenai Peninsula."

It stretches from near Point Possession in the north to Kachemak Bay State Park on the south. On the east it abuts the mountains of the Chugach National Forest and the Harding Ice Field of Kenai Fjords National Park. On the west it lies alongside residential areas from Nikiski to Sterling to Kasilof and further inland along Native and state parcels down to the Fox River Valley and the mountains south of it. Its roughly two million acres include Tustumena and Skilak lakes, the Kenai Moose Research Center, the Swanson River oil and gas field and most of the peninsula's surviving habitat for moose, brown bears, wolves, lynx and fur bearers.

The refuge employs about 30 people year-round and 30 more seasonally during the summer. They work as rangers, pilots, administrators, fire personnel, campground operators, game wardens, wildlife biologists and hosts at the visitor center in the headquarters on Ski Hill Road near Soldotna.

Wildlife refuges are set aside to provide homes for wildlife and are distinct from parks. They are managed by the U.S. Fish and Wildlife Service, an agency under the U.S. Department of Interior.

The KNWR was originally established in 1941 under the name Kenai National Moose Range. Since that time, it has shifted boundaries, reorganized and become part of the refuge system.

Preserving wildlife, water quality and migratory bird corridors are top priorities for the refuge, West said. But it also has a mandate to provide for education, research and public recreation. The requirement for public access makes it unique in Alaska, he said, and poses challenges in balancing potentially conflicting goals. Some groups using the refuge include hikers, sport fishers, trappers, hunters, wilderness guides, canoe paddlers and firewood cutters.

He told the Friends organizers that he wants their group to serve as a sounding board for the community and to advise him on management decisions.

The KNWR is one of two federal wildlife refuges based on the Kenai Peninsula. The other is the Alaska Maritime National Wildlife Refuge, which is based in Homer but manages remote island parcels all over the Alaska coast from Southeast Alaska to the Aleutians to the Arctic Ocean. The maritime refuge does not have a friends group at this time but is discussing the possibility of starting one.

Alaska wildlife refuges receive some independent support from the Alaska Natural History Association, which raises funds for refuges through operating gift and book shops in refuge visitor centers and by issuing publications on Alaska's natural history.

The idea of setting up a friends group is part of a national movement to give the public more input into government functions.

Spearheading the movement is the National Wildlife Refuge Association, a national nonprofit founded in 1975, based in Washington, D.C., and dedicated to protecting and perpetuating the National Wildlife Refuge System. In October, 1996, it launched "The Friends Initiative" to help increase the number of successful refuge friends' groups by offering training and networking opportunities. The initiative's funding comes from the National Fish and Wildlife Foundation, the George Gund Foundation, the Plum Creek Foundation, the Turner Foundation Inc. and the U.S. Fish and Wildlife Service.

The local friends organizing effort is getting support from the KNWR and the National Wildlife Refuge Association.

People wanting to sign on to help with the organization phase should call Amy George at 262-1494.

KODIAK DAILY MIRROR
NOVEMBER 23, 1998

Fish board OKs Cook Inlet herring fishery

HOMER (AP) — The Alaska Board of Fisheries has decided to continue a limited commercial gillnet herring fishery along the eastern shore of upper Cook Inlet.

Both Sam McDowell and the Kenai River Professional Guide Association had asked the board to close the commercial fishery.

James Brady, regional commercial fisheries supervisor for the Department of Fish and Game, said sport fishermen argued that herring gillnetters might intercept king salmon and Dolly Varden, and that harvesting herring takes food from king salmon.

Fish and Game reopened the east side herring fishery last year after a five-year hiatus to allow depressed herring stocks to recover. To avoid taking king salmon and Dolly Varden, herring gillnets were prohibited within 300 feet of shore. Fish and Game posted observers and required fishermen to keep catch records.

The observers saw no king salmon taken, Brady said, and commercial fishermen reported taking none. They reported taking a half-dozen incidental Dolly Varden, he said.

The fishery brought in about 20 tons of herring, worth about $20,000. It was used mostly for bait.

The board decided to allow a limited fishery for the next three years. To provide additional protection for king salmon and Dolly Varden, it banned gillnets within 600 feet of shore.

KODIAK DAILY MIRROR
NOVEMBER 23, 1998

City council passes sea lion resolution

By DAN JESSUP
Mirror Writer

The city council passed a resolution at a special meeting Friday which saw some lively input from the audience.

Resolution 98-30 asks federal and state regulators to mitigate proposed sea lion protection measures.

Currently, the National Marine Fisheries Service is considering what commercial fishermen feel are draconian area closures to protect the mammal.

Audience member Mike Milligan said the resolution was a "good start" but they needed to expand it to include other fishing interests, like salmon, as well.

"Today they will end pollock fishing, tomorrow who knows what's next,?" he said.

Al Burch said NMFS has been "sleeping at the switch," and their mismanagement is as much to blame for sea lion population declines as any other cause.

"Pollock is not the primary predator fish for sea lions," he said.

"Many species that were once abundant are now depleted, like herring and crab," he said. "Young sea lions need all species to have a well-rounded diet."

Kristin Stahl-Johnson, of the Kodiak Community Conservation Network, expressed concern that the resolution was just "one more step toward having the courts deciding our fishing industry instead of biologists."

"I remember fishing pollock in the 70s when schools were 50 miles by 10 miles and fathoms deep," she said. "They are gone now."

"Our fisheries have traveled out west," she said referring to many species that have been fished out of commercial existence in the Kodiak area. "We've been on alert for 10 years to change the way we operate."

Stahl-Johnson said the reduction in pollock and now sea lions is like "a canary in the coal mine," an early indication of danger.

Fisherman Jay Stinson, president of the Alaska Dragger's Association, didn't agree with Stahl-Johnson's analogies, and said the threatened closures of fishing areas "should be a wake-up call" for everyone.

The council passed the resolution by unanimous vote, with councilmembers Mary Monroe and Barbara Stevens out of town on excused absences.

After the vote, councilmember Jesse Viscocho spoke to Stahl-Johnson and gave his opinion that he didn't feel this resolution would cause the courts to regulate our fishing industry.

CLARION PENINSULA
NOVEMBER 22, 1998

Massive scientific initiative spawned by 1989 oil spill

By SHANA LOSHBAUGH
Peninsula Clarion

As the 10th anniversary approaches of the 1989 Exxon Valdez oil spill in Prince William Sound, the EVOS Trustee Council and Exxon are taking stock of the enormous research effort the spill spawned. The public has the opportunity to hear what they've learned at an anniversary meeting in March.

The trustees, funded by money the courts took from the oil industry giant, have spent about $165 million so far on research and monitoring, said Stan Senner, the council's science director.

Exxon officials, asked about their expenditures on EVOS stud-

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ies, said their intent is to never release that information.

Studies have involved federal and state agencies, private science consultants and oil industry employees. The scope of the endeavor has greatly increased the amount known about the behavior of spilled oil, wildlife genetics and the marine ecosystem of Southcentral Alaska.

Studies conducted by agencies are public. Some Exxon studies are proprietary; others have been published in scientific journals and other places.

"They only release the information they choose to release," Senner said.

Exxon's science spokesman, Al Maki, was traveling and unavailable for comment.

The U.S. Fish and Wildlife Service sponsored a symposium in Anchorage in 1990 to review the sea otter rehabilitation effort. The trustees sponsored one to review preliminary damage assessment studies in 1993.

Exxon science contractors took part in the sea otter symposium but not the damage assessment meeting. They chose to present their findings at a meeting of a technical society on the East Coast.

The trustees' council is now organizing another symposium, titled "Legacy of an Oil Spill: 10 Years After Exxon Valdez."

Exxon scientists were invited to participate, but none signed on to make presentations, Senner said.

"They pick their forums carefully," he noted.

The trustees' anniversary symposium will be March 23-26 at the Egan Convention Center in Anchorage.

Topics will include the status of injured resources, recovery, lingering effects, gains from efforts to restore natural resources and human services, and lessons learned about spill prevention and response.

Fees will be $15 for the first day overview, $70 for full registratic before March 1, and $100 for re istration after March 1.

Valdez will host two days events beforehand, March 21-2 focusing on spill prevention a response.

The Alaska Wildlife Respon Center will hold a reception Anchorage for participants March 25.

Symposium organizers ha also arranged a trip to Seward March 27 with tours of the Alas SeaLife Center and a gray wha watch voyage.

Registration forms for t anniversary symposium are ava able by calling the EVOS Trust Council Restoration Office 278-8012, e-mailing them restoration@oilspill.state.ak. or on their web site at www.oilspill.state.ak.us

Alaska scientists challenge Exxon findings

CLARION PENINSULA
NOVEMBER 22, 1998

By SHANA LOSHBAUGH
Peninsula Clarion

New studies from the National Marine Fisheries Service dealing with the 1989 Exxon Valdez oil spill contradict Exxon reports and may have major implications for the oil industry and fisheries in Alaska.

Results suggest that oil has more long-term toxic effects on fish than previously suspected, that Alaska's southcentral coast was more pristine prior to the spill than Exxon has admitted and that oil industry studies contain serious flaws. If the new findings are accurate, fishing and oil development may be less compatible over the long term than previous studies suggested.

Chemists and biologists affiliated with the NMFS Auke Bay Laboratory for fisheries science near Juneau are releasing findings this fall in two major areas. One set deals with the reactions of salmon and herring fry to trace pollution. The other deals with the source of natural background chemicals that resemble oil in the sea.

Both sets of NMFS studies conclude that oil spills, including small chronic leaks, may damage fish and other marine wildlife more than previously believed. The scientists involved say current water quality standards may be too lax to effectively protect the resources.

Fish fry vulnerable

The fish studies conclude that some ingredients found in weathered Alaska North Slope crude oil are so poisonous that even amounts below one part per billion can damage salmon eggs and young fish.

Jeff Short from NMFS presented the results of experiments with pink salmon on Oct. 3 at an Anchorage symposium sponsored by the American Fisheries Society. Exxon scientists present immediately rejected the NMFS conclusions. Participants convened a panel discussion to debate the merits of the studies.

"They kind of duked it out," said Stan Senner, the science coordinator for the Exxon Valdez Oil Spill Trustee Council, which funded the NMFS research.

Panelist Al Maki, spokesman for Exxon's scientific research in Prince William Sound, attributed the NMFS finding to statistical artifacts. Another scientist working for the oil company said the salmon fry in the study were damaged by clumsy handling rather than oil.

But NMFS has studies of herring as well as salmon to back up its claims.

The NMFS researchers repeated the experiment three times and got the same results with a high level of statistical significance, Short said.

"This conclusion is controversial because it demonstrates a sensitivity to the toxic components of oil that is much greater than previously recognized," Auke Bay scientists said in a written statement after the meeting.

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"Exxon has challenged these conclusions with data presented in one publication. The trustee conclusions are based on seven different publications involving 17 independent researchers representing five different agencies — including Exxon," they wrote.

The trustee council requested the studies after pink salmon spawning in intertidal areas oiled in 1989 failed to produce normal offspring as late as the summer of 1993.

The lingering effects surprised scientists, Senner said, and the trustees wanted to find out why recovery was so slow.

They set up experiments in the laboratory to mimic what had happened in the sound, exposing eggs and fry to seawater percolated through gravel sprayed with oil.

Eggs hatched prematurely, and fry showed abnormally high birth defects, including stunting, twisted backbones, swollen egg sacs, deformed jaws and microscopic evidence of genetic mutations. Malformations resembled those seen in studies with dioxin, a dangerous industrial pollutant.

Before these findings, most scientists believed that the volatile chemical fraction of crude oil that evaporates readily was the most toxic and that oil in the environment became less dangerous as it aged. The new results suggest that pockets of residual weathered oil from spills can cause localized problems for many years.

They may not kill adult fish or eggs outright, but cause "sub-lethal" damage that weakens and stunts fry. Because salmon and herring reacted the same way, the biologists suspect all fish are susceptible.

Coal threatens to scuttle Exxon assertion

Last week, NMFS and Exxon scientists squared off again at the annual meeting of The Society of Environmental Toxicology and Chemistry in Charlotte, N.C.

The technical debating question was whether natural oil seeps or coal deposits produced background chemicals detected in Prince William Sound that resemble those from spilled Exxon Valdez crude. Discussions focused on technical details about hydrocarbons, a large family of molecules found in petroleum, burned material, plants and a variety of other sources.

But the underlying questions deal with whether or not Prince William Sound was pristine before the tanker hit Bligh Reef, whether or not marine wildlife had previous adaptations to endure trace oil, and whether lingering remnants from the spill still damage the ecosystem.

The big difference between seep oil and coal is that the oil would affect the environment the same way as man-made pollution, but the same chemicals in coal cannot get into the food chain.

"They are just not bio-available," said Susan Saupe, the science director for the Cook Inlet Regional Citizens Advisory Council (CIRCAC) in Kenai, which sponsors similar research in Cook Inlet. "They are kind of stuck, embedded in a crystal matrix."

Studies Exxon funded suggest spilled crude degraded and diluted quickly and got lost in the chemical background noise of natural hydrocarbons.

"By 1990, Exxon Valdez crude was generally a small increment on the natural background..." according to a 1996 report in the journal "Environmental Toxicology and Chemistry."

Geochemists read an area's geologic history through chemical clues. They sample water, oil, soil and sea floor sediments and analyze them for traces of the complex soup of hydrocarbons that occur in petroleum products.

State-of-the-art chemical "fingerprinting" lets scientists trace the origin of petroleum (natural or artificial), somewhat like genetic testing helps forensic laboratories trace criminals from minute bits of hair or blood left at crime scenes.

In the case of marine oil, geochemists look at the relative amounts of dozens of hydrocarbons with jaw-breaker names and formulas that look like chicken wire. They take into account factors such as weathering, bacterial digestion and how the petroleum sticks to water-borne silt particles.

Using such techniques, a research team Exxon hired led by David Page, a chemist from Bowdoin College, and Paul Boehm, a specialist in petroleum fingerprinting from the international consulting firm Arthur D. Little Inc., traced background hydrocarbons in the sound to natural oil seeps at Katalla (near the Bering River) and Yakataga, along the Gulf of Alaska coast east of the Copper River.

The Alaska Department of Natural Resources Oil and Gas Division has no information on seep volumes and no leases scheduled in the area at this time. Oil drilling at Katalla closed down about 60 years ago.

Details on the seeps are sketchy, because current technology cannot measure them directly.

Exxon's scientists estimated that 2,500 to 8,400 barrels of oil per year — as much as 1,200 tons or more — seep naturally out of the ground and sea floor at those sites, and that a substantial portion travels in the Alaska coastal current to Prince William

Sound and other points west.

Teaspoons rather than tons would be closer to reality, Short said. He characterized the seeps as "pathetically small."

Instead, he and his colleagues at NMFS see coal as the obvious source for the background hydrocarbons.

Two 1996 reports sponsored by Exxon said no coal deposits have been reported to the east of the Copper and Bering rivers.

Short criticizes Exxon studies as having gone to "astonishing lengths" to avoid investigating the coal contribution. In his presentation at the conference last week, he discussed coal formations and showed slides of black coal dust on beaches in the area.

The coast near Katalla contains "several thousand tons of coal" and when analyzed it gave "an identical chemical signal to what is in the bottom of Prince William Sound," Short said last week. "I think it's odd for them to just overlook that."

Jousting geochemists

"We're not discounting coal," Boehm responded from his office in Cambridge, Mass.

The Exxon researchers didn't analyze coal because they didn't have maps at the time that showed coal in the area, and felt that all chemical evidence pointed to the oil seeps.

Short sent a letter to the journal that published Page's and Boehm's study.

"Coal was erroneously dismissed as an alternative source," he wrote, pointing out the available coal beds in the area.

In their written response, the scientists for Exxon acknowledged they hadn't known about the coal in the area, and also admitted new chemical analyses that seem to rule out the Katalla oil seep as a source.

They stuck with seeps from the sea floor near Yakataga as the source for all of the sound's hydrocarbon background, and printed a graph of chemical ratios to illustrate the relationship.

"The Bering River coal fields east of Prince William Sound cannot be the dominant source of this hydrocarbon background," Boehm said via e-mail. "The fingerprint of the (petroleum chemistry) in Prince William Sound sediments closely matches that of Yakataga oil and is very different from Bering River coals, based on the use of very stable marker compounds."

Short's letter and a written rebuttal to it from Page, Boehm and their colleagues appeared in the September issue of the journal.

But when Short studied what the Exxon scientists had written, he discovered that the points on their graph didn't match the original data. They omitted some points, included other samples that didn't contain enough oil to show anything and mislabeled a sample from a coal beach as "shoreline/lake sediment."

Short contends the real data, if put onto Exxon's graph, reverses its meaning and supports his conclusions.

"This is a highly irregular event," he said. "I've never seen anything like this."

He was upset enough by the turn of events to pass out copies of both versions of the graph at the environmental toxicology and chemistry meeting on Wednesday.

"I'm not sure what Dr. Short is saying here," Boehm responded.

He examined both figures and admitted his team had made errors. But the chemical fingerprints for the coal don't match no matter which labels are used, he said.

The revisions to the graph don't alter the results, Boehm said, and he is still convinced that seep oil is the most important background source.

"We have a lot of data," he said.

Boehm cautioned that items presented at meetings are often preliminary, haven't been scrutinized by the peer review process and should not carry the weight of results published in the technical journals.

The coal versus seep oil issue is interesting, he said, and seems to have generated some jousting.

Saupe was the only person from the Kenai Peninsula at the meeting in North Carolina.

After seeing Short's presentation, she is convinced his premise about coal being the main source is correct and Boehm's group is off track.

"His argument is real strong," she said. "There is just no way seeps can account for all that. I believe what Jeff Short's data show."

She prefers to view the scientists' disagreement as "two different interpretations of the same data" rather than "taking sides," she said.

The errors the Exxon scientists have published are substantial, but she doesn't attribute any ulterior motives to the situation.

"It's too obvious," she said. "I think it was an honest mistake."

Major implications

The NMFS studies have "huge implications" for Southcentral Alaska, Saupe said.

The NMFS work on coal challenges a dogma about seep oil, and is likely to prompt even more interest in Alaska coal studies, she said.

Coal studies were listed as a research priority at CIRCAC's workshop in Kenai in October, which Saupe organized. CIRCAC wants to identify natural hydrocarbons in Cook Inlet to monitor effects of the oil indus-

try.

The federal Minerals Management Service also is examining sediments in Lower Cook Inlet and Shelikof Straits as part of its studies for offshore oil lease sales.

Bochm and other Arthur D. Little scientists have headed Cook Inlet studies, including coal analysis, for both CIRCAC and MMS.

In one sense, the background hydrocarbon issue plays a secondary role to spilled oil from the Exxon Valdez. But it may have legal and scientific ramifications.

Some animals in Prince William Sound are still having trouble nine years after the oil spill. When petroleum gets in the food chain it changes, so scientists can't fingerprint oil toxins in animals.

"We continue to see biochemical evidence of exposure to hydrocarbons," said Senner from the oil spill trustees' office, "in samples such as sea otter blood."

Background oil from seeps could explain that, offering Exxon a biochemical alibi against accusations of long-term effects.

But if the natural hydrocarbons in the sound do come from coal, the evidence would suggest long-term pollution from the spill.

The studies of toxic effects on fish may have even bigger implications.

The state of Alaska has some of the most stringent water quality standards in the world. Its threshold level for polynuclear aromatic hydrocarbons (PAHs), the petroleum compounds of the highest concern, is 10 parts per billion.

The U.S. Environmental Protection Agency's acute water quality criterion is 300 parts per billion.

The new studies imply that even Alaska's tough standards are not stringent enough, Short said, to sustain fish and shellfish for future generations.

"We think it will probably have to be lowered by a factor of 100 or 1,000," he said.

If borne out, the results apply not just to Prince William Sound, but to Cook Inlet, all of Alaska's coast and, indeed, the world.

Tougher standards could affect industry activities such as discharge permits, ballast water treatment and offshore oil platforms.

"This is really interesting," said the state water quality standards coordinator, Katy McKerney from the Alaska Department of Environmental Conservation.

She noted that industry groups have criticized the state government for setting such high water quality standards in the past, and predicted the oil industry in particular would react strongly to any proposed changes.

"But our mission is to protect the resources," she said. "If the science is solid we would definitely consider changing the standards."

ANCHORAGE DAILY NEWS
NOVEMBER 22, 1998

Looking UPSTREAM

KNAPP: Predictions look at future of Alaska salmon industry

By GUNNAR KNAPP
Special to the Daily News

What does the future hold for the salmon industry? The past decade has brought dramatic change. What further changes might we expect in the coming decade, and beyond?

Trying to predict the future can be a useful exercise, mainly because it forces us to think about how different factors may interact to determine the future — and in doing so to begin to think in new ways about the challenges and opportunities we may face.

It is in that spirit that I offer the following predictions for the future of the salmon industry. They represent my sense of likely future trends or developments as the industry continues to change in response to natural, market, technological and political forces.

My goal is not to persuade you that I am right. I am also not arguing for any specific strategies or policies in response to these predictions. My purpose is simply to stimulate discussion of what the future may hold — which is a necessary starting point for thinking about what strategies or policies may be needed.

Some of my predictions are simply for the continuation of trends that are already well under way and recognized. Others are more speculative. It is unlikely that all of my predictions will come true: the future always holds surprises. But there is a good chance that most of them will come true. A stronger case can be made for some predictions than for others.

Keep in mind that these are not predictions for what will happen this year or next year, but rather for changes that are likely to occur gradually over the next decade and beyond.

BILL ROTH / Anchorage Daily News
Gunnar Knapp

Economist Gunnar Knapp predicts the salmon industry's future

1997 world salmon production

Round weight in thousands of metric tons

Species	Farmed	Wild	Total	Alaska catch	Alaska % of total
King	18	10	28	5	18%
Red	0	131	131	85	65%
Silver	87	15	102	10	10%
Pink	0	300	300	129	43%
Chum	0	315	315	59	19%
Atlantic	600	0	600	0	0
Total*	705	771	1,476	288	20%

* Excludes farmed trout

Source: Salmon Market Information Service
RON ENGSTROM / Anchorage Daily News

Farmed salmon production

1. Farmed salmon production costs will continue to decline. Factors contributing to lower production costs will

Please see Page C-6, KNAPP

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include increased feed conversion efficiency (partly by the breeding of faster-growing fish) and increased efficiency in fish processing and distribution. Yes, it is true that costs of fish meal may rise due to increased demand for fish feed as well as resource changes. But salmon farmers are predicting that other feed sources, including vegetable-derived feeds, will be developed. Keep in mind that the farmed-salmon industry is still young — two decades old — in contrast to the thousands of years over which experience has accumulated in meat and poultry farming. There is every reason to expect that substantial further cost reductions will occur.

2. World farmed-salmon production will continue to grow. Total world farmed-salmon production increased from 7,000 tons in 1980 to 300,000 tons in 1990 to 700,000 tons in 1997. As costs of production continue to decline, farmers will have every incentive to continue to expand production. Certainly factors such as disease, storms, declining prices and political opposition will lead to reduced production in some years and/or in some countries, but over time global farmed salmon production will continue to increase.

JIM JAGER Daily News file photo

Frank Bjazevich fights to keep his balance on the pitching F/V Marie K while untangling salmon from his driftnet.

Wild salmon harvests

3. Average wild salmon harvests will decline from levels of the 1990s — perhaps substantially. Contributing factors will include:

• "Regime shifts" in ocean conditions. Scientists have found correlations between long-term shifts in ocean climate conditions and harvests of salmon across the Pacific Rim. The 1990s have been a period of record harvests; it is likely that periods of lower harvests will happen again.

• Reductions in harvests of healthy commercial stocks to protect weaker stocks.

• Increased competition for the resource from sportfishing. Commercial fishing in many parts of the world, including Alaska, is subject to increasingly intense pressure from sportfishermen wanting a greater share of fish resources. These pressures are likely to intensify in Alaska, in particular in areas close to urban centers and for species prized by sportfishermen.

• Increasingly negative public attitudes toward commercial fishing, due to perceptions of overfishing, bycatch waste and ecological damage, as well as "fish rights" activism. These strengthen political forces working to restrict commercial harvests.

• Reduced subsidies for hatcheries in Alaska as state revenue declines, and as lower prices reduce the perceived economic benefits associated with hatcheries.

• Lower profitability of wild-salmon fisheries as average prices decline. As prices decline, commercial fishing will not be economically viable for some wild runs for which the costs of processing and transporting salmon to market exceed market prices.

4. Wild-salmon harvests will continue to fluctuate from year to year. They always have. Significant and unpredictable year-to-year fluctuations in wild harvests represent a permanent source of market instability for wild salmon, and add to the cost and economic risk of wild salmon harvesting and processing.

5. Russian wild-salmon harvests and supply to world markets may increase relative to North American harvests. This could come about as a result of Russia's shift to a market economy, increased foreign investment and reduced restrictions on trade. However, other factors, including political uncertainty and lack of effective resource management, could delay or reverse increases in Russian supply.

6. Despite declining wild harvests, total world salmon supply will continue to increase. Any decline in wild harvests will expand market opportunities for farmed salmon.

Farmed-salmon prices

7. Average prices for farmed salmon will continue to decline, although not as rapidly as in recent years. Farmed-salmon prices have been trending downward gradually over the past decade in response to increasing world supply of both farmed and wild salmon. This decline in prices has enabled world markets to absorb vastly expanded production. Further, farmed-salmon price decreases will occur as farmed production increases and costs decline. However, growing demand will allow world markets to absorb future increases in world farmed-salmon supply with relatively small price reductions.

8. Costs of production for farmed salmon will become the major factor driving long-run average prices of farmed salmon. As long as prices exceed farmed salmon production costs, farmers will expand production, which will in turn drive prices down until they approach costs of production.

9. Periodic oversupply and undersupply will cause price cycles for farmed salmon — similar to price cycles for hogs or pigs. Because of the long time required to grow farmed salmon, farmers base their production on prices they expect to receive two or more years in the future. It is unlikely that actual production will be at levels needed to hold prices constant. In years of oversupply, prices will fall. In years of undersupply, prices will rise.

Wild-salmon prices

10. As farmed salmon commands an increasing share of world salmon supply, wild-salmon prices will be driven increasingly by farmed-salmon prices. Wild-salmon products perceived to be of higher quality will be able to command higher prices than farmed-salmon products; wild-salmon products perceived to be of lower quality will command lower prices than farmed-salmon products. Prices for high-quality, niche-market, wild-salmon products will be least affected by farmed-salmon prices.

11. Gradually declining farmed-salmon prices will put downward pressure on wild-salmon prices. However, if wild-salmon supply declines, this may partially or fully offset the effects of lower farmed-salmon prices.

12. Average prices for wild red, king and silver salmon are more likely to decline than prices for pink and chum salmon. This is partly because higher-valued red, king and silver salmon compete more directly with farmed salmon, while chum and pink salmon prices are already low compared with farmed salmon. In addition, in recent years, ex-vessel prices of pink and chum have approached a "floor" imposed by the cost of catching the fish: prices cannot fall much farther or the fish will not be harvested — reducing supply of these species and helping to maintain prices at or above this floor.

13. Average ex-vessel and wholesale prices for wild salmon will continue to fluctuate from year to year, but prices for wild salmon will become more stable than they have been in recent years. Year-to-year variations in wild harvests will continue to cause prices to vary from year to year. But as wild salmon's share of world markets declines, variations in wild harvests will have a relatively smaller effect on total supply or on prices, including prices of wild salmon.

Salmon consumption and markets

14. World salmon consumption will continue to rise as world farmed-salmon production expands. Farmed and wild-salmon producers will produce only as much as consumers are willing to buy — and eat.

15. The greatest increases in consumption will occur in places with relatively high incomes that do not yet have high per-capita consumption of salmon or other fish. These places include the United States, some European countries, recently industrialized countries such as Taiwan and South Korea, and other countries with significant higher-income populations, such as China and Brazil. Because salmon is a relatively high-cost source of protein compared with feed grains, there is less opportunity to develop markets among lower-income consumers in developing countries.

16. Japanese buyers will become less aggressive in purchasing wild salmon. Japanese per-capita consumption of salmon — and other fish — is already high compared with other countries. The long-term trend in Japan is toward stable or declining fish consumption and expanding consumption of other proteins. Japanese salmon consumption probably will level off or perhaps decline. Wild salmon also faces growing competition in Japan from salmon and trout. Retail trade in Japan is increasingly dominated by supermarkets that are seeking to lower prices to consumers by lowering their costs. In addition, the Japanese economy is not likely to grow as rapidly in the future as it did in the past.

17. Aggressive marketing by salmon farmers will play an important role in increasing salmon consumption. Salmon farmers recognize the need for and the benefits from marketing. Salmon farmers make large investments in growing salmon. Producers in countries such as Norway and Chile are actively involved in the development of new markets. Aggressive marketing, with new value-added products, have the potential to greatly expand world salmon consumption.

18. An increasing share of salmon will be marketed as value-added products. Because the competition for value-added salmon products is primarily other protein sources — rather than other fish — there is enormous potential for value-added salmon consumption to expand without significant reductions in price.

19. "Niche market" consumption of wild salmon will increase. As world salmon consumption expands, there will be many more salmon consumers. Some of the new consumers will be attracted by special characteristics of wild salmon — taste, color, nutritional value and "romance" — and will seek out wild salmon specifically for these qualities.

20. Per-capita canned-salmon consumption gradually will decline in developed countries. Canned salmon — while still an important market — is becoming old-fashioned compared to other products available to high-income consumers, including other fish products.

Alaska salmon harvesting

21. Alaska salmon will be harvested more efficiently, by methods that cost less and result in better quality. Market pressures will drive Alaska salmon harvesters to seek ways to cut costs and increase value. Political pressures will develop to change Alaska salmon management in ways to facilitate lower costs and higher quality. Harvesters that cannot cut costs and increase value will eventually leave the industry.

22. There will be fewer salmon fishermen. Part of the trend toward more efficient harvesting will be a reduction in the number of vessels used and fishermen employed. This trend has occurred in all agricultural industries.

23. Salmon traps will return to some Alaska salmon fisheries. Salmon traps represent a potentially efficient method of harvesting some Alaska salmon runs while also maintaining very high quality. They also represent a potential method of managing mixed stock fisheries to achieve very specific escapement goals. Traps are widely used in Japanese and Russian salmon fisheries. For these reasons, economic and political pressures will eventually lead to an end of the ban on the use of salmon traps in Alaska, and to the use of traps in some Alaska salmon fisheries — as the circumstances that led to the ban on traps are gradually forgotten.

Alaska salmon processing

24. Alaska salmon will be processed more efficiently at lower cost. As with salmon harvesting, economic pressures will force processors to find ways to reduce costs. There is excess processing capacity for many Alaska salmon fisheries. As salmon markets become increasingly competitive, some facilities will no longer be operated.

25. The quality of Alaska salmon products will continue to improve. This process will continue because competition will continue to increase quality standards for salmon in the market place.

26. Companies that process Alaska wild salmon will diversify into farmed-salmon production, and vice versa. Processing and marketing salmon is becoming increasingly complex and competitive. As the salmon industry becomes increasingly dominated by farmed salmon, companies involved in processing and marketing farmed salmon will have a competitive advantage in the processing and marketing of wild salmon.

27. The salmon industry will become increasingly competitive. The survivors in the Alaska salmon industry will be individuals and companies with some combination of lower costs, higher quality, effective product differentiation, effective marketing, and financial capacity to survive periods of lower prices.

❑ Gunnar Knapp is an economics professor at the University of Alaska Anchorage's Institute of Social and Economic Research. This is a revised version of a paper he prepared for a presentation to the Northwest Salmon Canners Association in October 1997.

Red salmon are off-loaded from a drift-netter's boat and dumped into a tender's hold after the red-salmon opener in Bristol Bay's Naknek district. Fishing tenders gather the fishing boats' catches and then deliver them to fish processors. Tenders, which can handle 50,000 pounds of fish a day, also can deliver fuel and other supplies to the boats.

JIM JAGER / Daily News file photos

At left, ships jostle for position during the red salmon opening on the Johnson Hill fishing grounds on Bristol Bay. Above, salmon are mechanically beheaded on a processing line before workers hand clean and gut the fish.

ANCHORAGE DAILY NEWS
NOVEMBER 22, 1998

CD-ROM has Inlet inside

Computer resource contains 125 maps

By JON LITTLE
Daily News Peninsula Bureau

SOLDOTNA — A Homer-based conservation group dedicated to Cook Inlet water quality has released an interactive CD-ROM that's a virtual Encyclopedia Britannica of the Inlet.

About 125 maps on the "Cook Inlet GIS Atlas" can be superimposed on top of each other, each layer showing something different. With it, a user can make an image that shows where plants and animals live, where the storm drains are and who owns what land — all on the same map.

"This is a tool that you don't have to be a rocket scientist to use to get a better handle on the issues in the community," said Bob Shavelson, executive director of Cook Inlet Keeper, which spent two years compiling information for the disc.

> *"This is a tool that you don't have to be a rocket scientist to use to get a better handle on the issues in the community."*
>
> **— Bob Shavelson, Cook Inlet Keeper**

It took that long to gather research and data from the Kenai Peninsula Borough as well as state and federal agencies. The data are sewn together on disc with a program called Geoexplorer.

When Geoexplorer is launched, it might show a map of shorebirds, for example. A user can click on Gull Island in Kachemak Bay and the program will open a window describing a survey of the island's birds. It will also explain what agency conducted the study and when and how it was done, Shavelson said.

He described the disc as accessible to a child but capable of sophisticated queries.

The CD cost about $125,000 to assemble, with most of the money coming from an $895,000 oil industry settlement over alleged Clean Water Act violations that created the Keeper three years ago.

Since the Keeper's inception, the group has insisted that regulators examining oil development or logging need to consider not just single issues but the cumulative effects of development on streams feeding the Inlet.

Shavelson said the disc helps people visualize the Keeper's point.

He said a user can call up maps showing the spread of spruce bark beetles from 1989

Please see Page B-2, CD-ROM

CD-ROM: Inlet data compiled

Continued from Page B-1

to 1997, then another layer showing timber sales, and another with salmon streams.

Besides the maps, the disc has two other components. One is a searchable digest of more than 400 published papers relating to Cook Inlet.

A keyword search for the word "clam" will deliver half a dozen hits on studies about such things as where clam beds are located and pressures bearing on the mollusks.

The disc also contains a list of other watershed organizations with links to their web sites.

About a month ago, the Keeper started giving the CD-ROMs to schools and libraries in the 47,000-mile Inlet watershed. The discs are for sale at $50 each, but Shavelson said the group will accommodate tighter budgets.

It's currently only in PC format, he said. But the group hopes to link the disc to the Internet, which would make it available to anyone with an Internet connection.

Copies of the atlas can be bought by calling the Keeper at 907-235-4068, or via e-mail, keeper@xyz.net.

Reporter Jon Little can be reached at jlittle@adn.com.

CLARION PENINSULA
NOVEMBER 20-21,1998

Herring fishery wins OK

By DOUG LOSHBAUGH
Peninsula Clarion

The Alaska Board of Fisheries decided during its meetings in Homer this week to continue a limited commercial gillnet herring fishery along the eastern shore of upper Cook Inlet.

Both Sam McDowell and the Kenai River Professional Guide Association had asked the board to close the commercial fishery. James Brady, regional commercial fisheries supervisor for the Department of Fish and Game, said sport fishers argued that herring gillnetters might intercept king salmon and Dolly Varden, and that harvesting herring takes food from king salmon.

Fish and Game reopened the east side herring fishery last year after a five-year hiatus to allow depressed herring stocks to recover. To avoid taking king salmon and Dolly Varden, fishers were banned from setting herring gillnets within 300 feet of shore. Fish and Game posted observers and required fishers to keep catch records.

The observers saw no king salmon taken, Brady said, and commercial fishers reported taking none. Fishers reported taking a

See FISHERY, page A-12

...Fishery

Continued from page A-1

half-dozen incidental Dollies, he said. Board of Fisheries member Ed Dersham said commercial fishers landed about 19.5 tons. The catch, sold mostly for bait, brought about $20,000.

Dersham said the board decided to allow a limited fishery for the next three years. To provide additional protection for king salmon and Dolly Varden, it banned gillnets within 600 feet of shore. Brady said the board directed the department to assess the age structure of the herring population, monitor bycatch of king salmon and Dolly Varden and manage fishing for a harvest of less than 40 tons.

The commercial gillnet fishery for herring at Chinitna and Tuxedni bays in western Cook Inlet also has been closed to allow depressed stocks to recover. With no fishing, Brady said, biologists have no idea of the state of herring stocks. Fish and Game had considered allowing a limited fishery next summer, he said, but the board directed biologists to assess herring abundance and age structure before allowing a fishery. When it was open, the Chinitna-Tuxedni fishery took no more than a couple hundred tons of herring each year, he said.

In other business, the board:

■ Declined to allow commercial drift gillnet boats to fish sockeye salmon in Resurrection Bay. Ted Otis, assistant area research biologist for Fish and Game in Homer, said representatives of Cook Inlet Aquaculture Association argued that drift boats would compete with CIAA's cost-recovery fishery, which lands sockeyes to pay for stocking efforts.

Otis said there also was public concern that while commercial seine boats targeting sockeyes can release king and coho salmon unharmed, gillnet boats might injure nontarget species.

The Board of Fisheries referred the proposal to a committee of board members and citizens that included several drift fishers, but nobody on the committee spoke in favor of opening Resurrection Bay to driftnets, he said.

■ Tabled a proposal to set a bag limit of two kings per angler between Nov. 1 and March 31 on Cook Inlet. Dersham said the winter Cook Inlet sport fishery is only one of several fisheries around the state that take king salmon spawned in other areas.

The board decided to convene a task force to consider sport and commercial harvest of nonresident king salmon across the northern Gulf of Alaska, including Cook Inlet, Kodiak and Prince William Sound. The task force is to deliver its report at the board's October 1999 work session, he said.

■ Halved the guideline harvest level for the Kachemak Bay personal-use gillnet fishery for silver salmon. Lee Hammarstrom, assistant area management biologist for Fish and Game in Homer, said wild silvers run later in the season than silvers stocked on the Homer Spit, which now provide most of the personal-use catch. Since the department quit stocking silvers at Caribou Lake, fewer fish return to upper Kachemak Bay. Biologists fear that a prolonged personal-use fishery could overharvest wild stocks, he said.

To solve the problem, Fish and Game proposed closing the personal use fishery Aug. 28, instead of the Sept. 15 closure now on the books. Instead, the board opted to cut the guideline harvest from the former goal of 2,500 to 3,500 silvers to a new goal of 1,000 to 2,000 silvers.

Dersham said the board was reluctant to adopt an early closure, because that would direct more fishing toward stocked silvers. He said cutting the guideline harvest level leaves more chance to harvest wild silvers, which are the intended target of the personal-use fishery. Hammarstrom said the reduced limits solve conservation concerns.

Homer's Larry Smith, a longtime advocate of the Kachemak Bay silver fishery, accused the board of violating an old agreement. When Kachemak fishers gave up their subsistence priority and agreed to fish under personal-use rules, he said, the personal-use fishery was to be at parity with sport and commercial fisheries.

Commercial boats eventually quit fishing silvers, he said, but sport fishers continue. If the board cuts the personal-use fishery, Smith said, it should make equal cuts to the sport fishery.

Dersham said there were no proposals on the board's agenda to address the sport silver fishery.

Smith said part of the problem is that Fish and Game spends all of its assessment money on hot spots like the Kenai and Kvichak rivers and leaves nothing to assess small runs like Kachemak silvers. He said he'll lobby to allocate 30 percent of the department's assessment money for small runs.

CLARION PENINSULA
NOVEMBER 20-21, 1998
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CLARION PENINSULA
NOVEMBER 20-21-, 1998

Halibut conflict remains

Fish board to name task force to write management plan

By DOUG LOSHBAUGH
Peninsula Clarion

The Alaska Board of Fisheries put off action this week on a Homer proposal for a moratorium on new entry to the Cook Inlet halibut charter industry.

Board member Ed Dersham, an Anchor Point fishing guide, said chairman John White of Bethel will appoint a task force during the board's Jan. 15-22 meeting in Kodiak to write a local halibut management plan to resolve conflicts between Cook Inlet charter boats, unguided sport fishers and commercial longline boats.

Dersham said the attempt to organize a similar task force in Ninilchik this month was laudable.

"The problem was, they appointed nine people just from Ninilchik," he said. "We can't have an area-wide task force and have nine people just from Ninilchik."

White will seek balance from around the region, he said, and stick to a workable number of people. Task force nominations are due to the board by Dec. 15, he said.

During its meetings in Homer, the board convened a committee to discuss groundfish issues, including halibut, said Scott Meyer, the biologist who manages marine sport groundfish for the Alaska Department of Fish and Game in Homer. On it were board members, presidents of the Homer and Deep Creek charter associations, other charter skippers and commercial halibut fishers.

Charter skippers and commercial fishers favored a moratorium on new entry to the Cook Inlet charter industry, Meyer said. During prior testimony, he said, the Alaska Sportfishing Association opposed a moratorium, citing fears that limiting the number of charter boats in the face of growing demand could boost charter prices. But nobody volunteered to represent guided or unguided sport fishers on the groundfish committee, he said. Nor were there volunteers to represent Seward.

He said the board's direction can be strongly colored by who shows up at its meetings.

"That really underscores the need for users that feel strongly about an issue to show up and participate," he said.

Meyer said the groundfish committee discussed the moratorium essentially as a control date. If the North Pacific council imposes a moratorium or limited entry, charters not operating before the control date could be shut out.

But the committee neither picked a date, nor decided whether future limits should govern the number of charter boats, the number of fishing guides or the number of charter businesses, he said.

It did suggest that the southern boundary of any Cook Inlet halibut management area should lie roughly at the latitude of Point Banks on Shuyak Island. Its eastern boundary should be at the longitude of Nuka Point on the outer Kenai Peninsula.

According to Meyer, board member Dan Coffey said a proposed Kodiak halibut management area reaches north to the latitude of Cape Douglas, overlapping the proposed Cook Inlet area. A draft Valdez proposal sets the western boundary of a Prince William Sound halibut management area at the longitude of Cape Fairfield, Meyer said, taking about a third of the area used by Seward halibut anglers.

"There isn't consensus among users on how to divvy this up," he said.

Soldotna charter skipper Mel Erickson, who guides on the Kenai River and off Deep Creek, said it is good that the board is bringing people together to discuss halibut. But he expressed frustration that it put

See HALIBUT, page A-12

off action on the proposed Cook Inlet moratorium.

Erickson said the issue has been on the table since 1993. The board should advance a moratorium now, he said. Then, the task force could work on other issues. With several hundred charter boats on Cook Inlet, he said, there's enough competition to keep charter prices reasonable, despite a moratorium.

Erickson said the halibut population is high, now, but if halibut decline and the charter fleet grows, its landings could top the guideline limits. Restrictions on the Kenai River will shift more effort to Deep Creek, he predicted. Meanwhile, he said, the Deep Creek fishery is already so crowded that halibut grow scarce by the end of the season.

"The moratorium needs to be done to selected areas, and Deep Creek is definitely one of them," he said.

The board is discussing halibut proposals only because of a February agreement with the federal North Pacific Management Council, which holds the real power to allocate halibut.

At the request of Sitka longliners, the council recently set guideline harvest limits for the Gulf of Alaska and Southeast Alaska halibut charter fleets. It plans to impose restrictions on the charter industry if its landings exceed the guideline limits, and has appointed a working group to consider what restrictions to use.

Meanwhile, the council and the state board signed a protocol in February to encourage competing halibut users to write local management plans to resolve conflicts. The state board is to screen local plans, and forward those it approves to the federal council.

Ninilchik organizers held a meeting last winter to start writing a Cook Inlet halibut plan, but there was no consensus among competing groups. Charter skippers feared growth in the industry could push charter landings over the guideline limit, precipitating restrictions. So, the Homer Charter Association and the Deep Creek Charterboat Association asked the state board, during its meetings this fall and winter, to consider a moratorium on new entry to the Cook Inlet charter halibut fishery.

Dersham said a Cook Inlet charter moratorium would probably be linked to a separate guideline charter halibut catch limit, split off from the Gulf of Alaska total. He said charter skippers view a moratorium as the only viable way to avoid shortened seasons or smaller bag limits, if charter landings exceed the federal guideline limits.

Meanwhile, unguided sport fishers asked the board for other restrictions on the Cook Inlet charter industry. The Kodiak Fish and Game Advisory Committee feared growth in Cook Inlet charters might push the Gulf of Alaska over the guideline limit, threatening growth of Kodiak charters. It proposed splitting off a separate Kodiak halibut management area.

Then, just before the board's meetings this week, Ninilchik organizers reconvened and formed a task force of charter, commercial and unguided sport fishers to work on a local halibut management plan. Dersham said he expects the board's coming task force will include some members of the Ninilchik group. The board's task will have no time limits, he said.

"They're just going to be told to work on a local area management plan, consider all the issues, and come back to the board when they're ready," he said.

The task force will likely discuss issues raised in current proposals to the board — local depletion of halibut in heavily fished areas, and conflicts between user groups, he said.

The North Pacific council's working group is considering a charter moratorium as one way to restrict the charter fleet if charter landings exceed the guideline limits, he said. But if the council rejects that idea, and charter skippers still favor a moratorium, their only avenue would be to pursue it as part of a local management plan.

Meyer said his department opposes a statewide charter moratorium, and opposes broad moratoria for the Gulf or Southeast. Fish and Game feels there is room for charter industry growth, particularly in local areas within Kodiak and Prince William Sound, he said.

Fish and Game would not oppose a charter moratorium as part of a local Cook Inlet management plan, he said. But for the proposals now before the state board, he said, there is no evidence of the broad consensus among user groups required by the February protocol between the board and the federal council.

CLARION PENINSULA
NOVEMBER 20-21, 1998

New maps to show sound's sensitive spots

ANCHORAGE (AP) — Maps showing biological sensitivity and other data about shoreline along Prince William Sound will be updated in a year-long project led by the National Oceanic and Atmospheric Administration. The information would be used in responding to oil spills.

"The project will completely update the environmental-sensitivity index data for a region of the state rich in critical resources," said Larry Iwamoto of the state Department of Environmental Conservation.

The old maps are more than 15 years old.

They will be updated with information gleaned from studies made since the Exxon Valdez oil spill in 1989.

ANCHORAGE DAILY NEWS
NOVEMBER 21, 1998

Sound shoreline data to be updated

Maps showing biological sensitivity and other data about shorelines along Prince William Sound will be updated in a yearlong project led by the National Oceanic and Atmospheric Administration. The information could be used in responding to oil spills. Existing maps are more than 15 years old. They will be updated with information gleaned from studies made since the Exxon Valdez oil spill in 1989. The state is providing $27,900 for the project, which also is supported by the Exxon Valdez Oil Spill Trustee Council, the Oil Spill Recovery Institute, the Coast Guard and the Prince William Sound Regional Citizens' Advisory Council.

Daily News staff and wire reports

KODIAK DAILY MIRROR
NOVEMBER 20, 1998

Seafood company aids local causes

Women and family services in Kodiak and the Alutiiq Museum and Archaeological Repository are the recipients of donations from American Seafoods Company.

Kodiak's Breast and Cervical Cancer Screening Project received $312 to purchase examination equipment for women without health insurance or who have limited funds. The screening project serves approximately 125 women each year.

The Kodiak Women's Resource and Crisis Center will use its $200 donation to purchase a VCR to help educate clients about domestic violence, parenting and other topics. KWRCC assists nearly 650 people annually.

The Alutiiq Museum received $800 to expand public programs and purchase chairs for its gallery.

This is the second year American Seafoods Company has donated a total of $50,000 to help fund worthy programs and projects throughout Alaska. Its Community Advisory Board, comprising Alaskans from around the state and Linda Kozak of Kodiak, meets several times yearly to review and vote on funding requests.

The next call for donation applications will occur shortly after the first of next year.

Cod association meets tonight

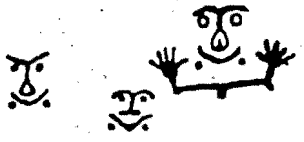
The Alaska Premium Cod Association will have a general membership meeting tonight at 7 p.m. in Fishermen's Hall.

The meeting's purpose will be to discuss the upcoming cod season and future plans for the association's new processing facility.

The gathering is open to all association members, and those wishing to join the association are encouraged to attend.

For more information contact Randy Blondin at 486-8588.

Alutiiq word of the week



Alutiiq Word of the Week
MAMAAYAQ: Cockle

Mamaayarsuqutartukut: We are going clam digging.

Kodiak's shores are encrusted with a wealth of intertidal organisms. Clams, cockles, whelks, mussels, sea urchins, chitons, limpets and periwinkles are all available in large quantities.

The Alutiiq harvested these resources throughout the year, but they were particularly important in the late winter and early spring. This was the time when food stores were exhausted and fresh foods were hard to find. Shellfish were an accessible abundant food that could be collected by anyone. A digging stick, an open weave basket, and a leisurely walk on the beach were the only harvesting requirements.

Today, some communities take advantage of low winter tides, and harvest shellfish in the dark by the light of kerosene lamps. According to elders, "when the tide is out, the dinner table is set."

Alutiiq people continue to enjoy shellfish although they are wary of the red tide. Clams and other filter feeders are easily contaminated by a deadly nerve toxin that can be present at any time of year and is difficult to detect.

How did coastal peoples avoid the red tide? It wasn't by shunning shellfish. Village sites from Attu to Ketchikan contain abundant evidence of clam dinners Perhaps villagers took their clues from the birds and fish that are also affected by the poison, or maybe they avoided clams from areas known to produce illness. Whatever the answer, their technique remains a mystery.

KODIAK DAILY MIRROR
NOVEMBER 20, 1998

New maps for sound

ANCHORAGE (AP) — Maps showing biological sensitivity and other data about shoreline along Prince William Sound will be updated in a year-long project led by the National Oceanic and Atmospheric Administration. The information would be used in responding to oil spills.

"The project will completely update the environmental-sensitivity index data for a region of the state rich in critical resources," said Larry Iwamoto of the state Department of Environmental Conservation.

The old maps are more than 15 years old. They will be updated with information gleaned from studies made since the Exxon Valdez oil spill in 1989.

The DEC is providing $27,900 for the project, which also is supported by the Exxon Valdez Oil Spill Trustee Council, the Oil Spill Recovery Institute, the Coast Guard, and the Prince William Sound Regional Citizens' Advisory Council.

Alaska Coastal Currents

By Jody Seitz

Perryville continues to deal with oil spill

When Evelyn Brown began studying juvenile herring at the University of Alaska Fairbanks she was hoping to develop another tool to help fish managers predict herring returns in Prince William Sound.

Three field seasons later, she not only has helped develop a deeper understanding of herring, but also about other species of fish important to seabirds.

Prior to Exxon Valdez oil spill studies, scientists knew close to nothing about tiny forage fishes, such as sand lance, capelin, hooligan (eulachon), or juvenile herring. This made it impossible to understand how the oil spill impacted their populations or affected the seabirds that preyed on them. In addition to the spill, there also were natural factors affecting their populations. Some seabird populations that depend on these fish for food have declined over the last 20 years, possibly due to a major ecosystem shift that changed their food supplies.

To find out how successful birds are at foraging for food, researchers have been mapping the distribution and abundance of these fishes using hydroacoustics and an underwater video camera. They found schools of forage fish, but saw few birds feeding on them.

Brown took a more aerial approach. The underwater surveys were too deep, she said. "It's pretty simple," Brown said. "Basically I'm flying in an airplane so I'm seeing what birds see and they seem to be visual predators. Seeing subsurface and seeing other birds feeding is a really important cue to them."

Brown conducts daily surveys of the sound over the course of the summer using an airplane with a GPS (Global Positioning System) coded video camera mounted inside. Between the acoustic surveys and the aerial surveys, researchers have found out a lot more about forage fishes.

"There are places in the sound where these fish occur year after year after year," Brown said. "If you look for them you can see shelves where there's good ocean circulation and eddy formation. And hooligan seem to be feeding on these shelves." Accurately identifying a school from the air can be tricky.

Brown developed her aerial survey with advice from spotter pilots and techniques learned from her days as a fisheries biologist at the Alaska Department of Fish and Game. Over the past three summers she's worked with catcher boats to verify the schools she was seeing from the air.

She says the surveys can be accurate for age-one herring, but that it can be difficult to tell the subtle difference between schools of age-zero herring and age-zero sand lance. With capelin, hooligan, and age-one herring there's very little error — less than 10 percent, she said.

Brown has documented basic information for these forage fish species, especially for sand lance, which are difficult to assess other than by aerial survey. "We knew sand lance were abundant and played an import role in the ecosystem but we really didn't have any idea of how widely distributed they are or what kind of population shifts take place."

These studies represent the first data on these four species in the northern Gulf of Alaska. Though researchers have seen increases in all these species since 1995, it's still too early to say if this represents a trend in the Gulf of Alaska.

Jody Seitz lives in Cordova and also produces the Alaska Coastal Currents radio program. The series is sponsored by the Exxon Valdez Oil Spill Trustee Council to provide information about restoration activities within the spill region.

Students get opportunity to pitch in on scientific research

By Jody Seitz
For The Times

Coastal currents

Each year for the last couple of years, 25 to 30 high school students in the Chugach and Cordova school districts have had the rare opportunity to work with scientists as they conduct research in the field. The program, sponsored by the Exxon Valdez Oil Spill Trustee Council, is called the Youth Area Watch.

Students from remote settings get hands-on experience in some highly technical and specialized fields such as oceanography, marine mammal ecology, physiology, biochemistry, and marine ecology. The students have collected mussels for pristane analysis, tracked ocean temperatures and salinity near their communities, monitored the weather and received training in the biological sampling of harbor seals taken for subsistence.

Now anyone who has access to the worldwide web can find out about the Youth Area Watch and follow the students' monitoring and stewardship efforts. Jennifer Childress and Joshua Hall lead the project for the Chugach School District. They decided the students needed a web page.

"We thought it'd be a cool thing to do with the students. It's a part of our standards, so it's a good way to give them the chance to do their schoolwork and be part of the extracurricular things as well," said Childress.

Last year, the Chugach School District gave up credits and grades in favor of a set of 12 standards in 10 different subject areas. The students have to demonstrate a certain level of proficiency in the skills required in each standard in order to graduate. The first students graduated under the new curriculum this past May.

This web homepage links to pages written by the students at all the sites where the Youth Area Watch exists: from Valdez and Cordova, to Whittier, Chenega Bay, and Tatitlek. Although not all the sites have access to the Internet as yet, students still receive disk updates of the page periodically through the district.

With the new road going in to Whittier, students there became concerned about possible effects on a nearby kittiwake colony. They're monitoring the colony and posting their baseline data on the web. The students can also now examine each other's weather data and oceanographic data to compare conditions across the Sound. Students in Seward and Cordova conducted beach clean-ups and recorded what they found. Seward students also worked with the National Park Service to study murre carcasses collected after a large die-off there earlier this year. Valdez students worked on restoring an old cemetery.

Childress and Hall are proud of the students and the work they do. They see the web as a great opportunity to share the program idea with teachers.

"It doesn't seem like anything like this (Youth Area Watch) is happening anywhere that we've heard of. So it's really neat to have this on there for people to see that this is happening. Maybe this will give people ideas of things they can do with students. Any school could do a restoration project anywhere if they wanted to, or find scientists to work with," said Childress.

"It's neat to offer this as a way give students the opportunity for technology training. We can bring the students in here and they can work on and publish a finished product. This is very real. People all over the world can look at it. They do some great things with the youth area watch and it's a great opportunity to show the world what they do," said Hall.

Look up the youth area watch at: http//www.micronet.net/users/-yaw.

Jody Seitz lives in Cordova and also produces the Alaska Coastal Currents radio program.

THE CORDOVA TIMES
NOVEMBER 19, 1998

THE CORDOVA TIMES
NOVEMBER 19, 1998

RCAC defending itself against attacks by oil industry

The Associated Press

ANCHORAGE — Accused by oil companies of being unruly and difficult to work with, an oil industry watchdog group that gets funding from the companies has started defending itself.

The Prince William Sound Regional Citizens Advisory Council says it's just doing its job, policing an industry that has a poor history of monitoring itself.

The oil shippers who operate in the sound contend the RCAC oversteps its authority and has supported lawsuits against the industry.

But the accusations miss the point, one RCAC board member told the Anchorage Daily News.

"Our priority is safety. Their priority is making money, so I'm not surprised that they're critical," said Michelle O'Leary, a Cordova fisherman who represents the sound's fishing interests on the RCAC board. "If we agreed on everything, I doubt we'd be doing our job."

After eight years, Arco Marine Inc., British Petroleum Shipping and SeaRiver (Exxon's shipping company) find little in RCAC they would like to see applied to other ports in the United States.

"RCAC cannot be held as a model organization should it be seen to be necessary elsewhere," wrote Roger Gale, vice president of BP Oil Shipping Co.

The council was created after the 1989 Exxon Valdez spill to bring citizen oversight to the Valdez tanker port. The 19-member council of people from towns such as Homer and Whittier, and from groups such as fishing, tourism and aquaculture, oversees a staff and a $2 million annual budget funded by the oil industry.

Among its activities, the council reviews spill cleanup and prevention plans, researches the problem of icebergs in shipping lanes, studies tugboat technology and hires experts to examine oil company procedures.

The RCAC is unusual in that it gets money straight from the industry it monitors, a unique regulation scheme only shared with the chemical industry. The RCAC may also be unusual in its success.

"It's one of the most dramatic examples of effective citizen participation in environmental policy," said George Busenberg, a researcher at the University of Wisconsin, who wrote his Ph.D. thesis on RCACs.

The Coast Guard is charged with certifying the RCAC, something it does annually since the group was set up in 1990. The Coast Guard will likely rule on this year's certification by Thanksgiving.

Mild criticism from the oil companies is typical, said Coast Guard Lt. Mike Pittman. But this year the Coast Guard began reviewing the RCAC as a model for groups that could be mandated for Long Beach, Calif., Puget Sound and elsewhere.

The oil companies praised the safety changes the RCAC helped create but used most of their statements to criticize the group.

Funding for the RCAC is "inherently wrong," Gale wrote on behalf of BP.

Of concern to the oil shippers and Alyeska Pipeline Service Co. the oil industry-owned company that runs the Valdez port — is a working relationship that often is confrontational. Meetings are sometimes spiked with barbed comments. At a June meeting, several RCAC board members said they could never trust the oil industry, according to Alyeska.

"Our mission here is not to get along; it's safety," said Tom Copeland, a board member who represents environmental groups.

The oil companies also want changes in the RCAC's structure, including limiting board members to representatives of local communities and ending interest group representation because those groups are not accountable to the public.

The companies also want communities to pay a share of RCAC expenses. Separating power from the purse does not lead to accountability, they contend.

"Those who are assigning priorities of a group should have some skin in the game," said Richard Ranger, manager of safety and emergency response for Arco Marine.

John Devens, executive director of the RCAC, said giving control of the group to whoever pays the bills would undercut its credibility. "We're a group of citizens empowered by this money," he said. "It's a unique situation."

ANCHORAGE DAILY NEWS
NOVEMBER 19, 1998

Kenai keeps 50% tax cut for river work

By JON LITTLE
Daily News Peninsula Bureau

SOLDOTNA — The Kenai Peninsula Borough government has extended a little-used tax break that can save some riverfront property owners enough money for a round-trip ticket to Seattle or a VCR.

Since 1995, people who repaired or protected sensitive fish habitat on their property along the Kenai River qualified for a 50 percent cut in borough taxes on that property.

The tax break was scheduled to die in December, but on Tuesday the Borough Assembly voted unanimously to extend it until 2001.

Borough officials promote the tax break as a pat on the back for landowners whose efforts to protect the Kenai River help countless others enjoy its fisheries. Still, they wonder why only 10 percent of the qualified landowners bother to apply.

"I don't know what the problem is," said John Mohorcich, a borough planner who handles construction permits along the river.

The program applies to the Kenai River and all of its tributaries, such as the Killey River near Sterling, Quartz Creek in Cooper Landing and stream-front properties near Crown Point.

The tax break, which applies to riverfront land but not buildings on it, could cut $300 to $400 out of a borough tax bill on land worth about $60,000, Mohorcich said.

To qualify, a person has to fill out a one-page application and include receipts indicating they are building a gratewalk, dock or other structure that protects the brush overhanging stream

Please see Page B-2, TAX

TAX: Peninsula extends break

Continued from Page B-1

banks. Sheltered banks are considered critical habitat, where juvenile fish feed on bugs and rest in slow-moving water.

On average, fewer than 20 of about 200 people doing that kind of work apply for the tax break, Mohorcich said.

A typical project protecting a stream bank will cost several thousand dollars. This year, for example, landowners doing $342,000 in riverbank repairs will have applied for the borough credit, saving themselves a combined total of $16,000 in taxes, according to borough.

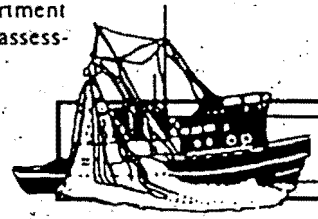
Many see the tax break as a drop in the bucket, Mohorcich said. "That's what the people who apply for this say: 'Man, I'm not going to get rich doing this, but every bit helps.' "

Reporter Jon Little can be reached at jlittle@adn.com.

Kamishak Bay taken off the herring circuit for '99

DECLINING STOCKS IN KAMISHAK BAY have forced the Department of Fish and Game to call off the 1999 sac roe fishery. That shouldn't come as much surprise to fishermen, who have seen their catches decline every year since 1995. With the biomass expected to be close to the 8,000-ton minimum threshold, the numbers aren't there to justify fishing, Area Management Biologist Wes Bucher told the Alaska Board of Fisheries last week.

IN HIS BOARD REPORT, Bucher noted that the Kamishak District is difficult to survey from the air because of its shallow, often-turbid water, and the department hasn't gotten a good assessment in six years. Estimates put next year's return at 6,000 to 13,000 tons. "The department feels it is in the best interest of the resource and the commercial fishery to protect the remaining spawning population until it rebuilds," Bucher wrote.



SEAWATCH

Joel Gay

PRINCE WILLIAM SOUND, IN CONTRAST, continues to bounce back after the 1989 Exxon Valdez oil spill. The herring biomass is expected to be nearly 40,000 tons when fishing begins next spring, with 4-year-olds predominating and a strong showing of 5-year-olds. Using a 15 percent exploitation rate, the Department of Fish and Game in Cordova has set the total harvest of nearly 3,800 tons, with seiners in line to take 3,447 tons. Although preliminary projections put the average size of the fish at 102 grams — well below the minimum sought by processors — the winter bait fishery that just concluded showed an average size of 110 to 115 grams, according to biologist Dan Sharp. Better yet, he said, they're fat and healthy.

BAIT HERRING FISHERMEN EASILY caught their quota in Prince William Sound earlier this month, landing 967 tons, according to Fish and Game's Dan Sharp. Five seiners took almost the entire quota, but two boats using a pair trawl also fished. They didn't do well, Sharp said, landing just one ton. That style of fishing had been tried in the late 1970s, he said, and it appeared to him that the net had been gathering dust since then. The two Cordova boats didn't have much luck, either, getting snagged on the bottom and fumbling with the gear at night.

NORQUEST SEAFOODS RAISED SOME EYEBROWS last week when it announced it would begin canning salmon in Petersburg next summer. "Lots of people are asking about it," said company senior vice-president John Garner. The Seattle-based processor is leasing the old Nelbro plant and will use three canning lines, focusing mainly on pinks, he said. Norquest has several freezer plants in Alaska but has contracted with other companies to do its canning. Given the strong returns to Southeast in recent years, the company decided to go into the canning business itself rather than continue to contract. "It seemed to us that it makes sense to have this (canning plant) in our portfolio," he said.

ALTHOUGH PESSIMISM ABOUNDS in the fishing industry these days, Norquest is trying to remain upbeat, Garner said. "We have a little different perspective." Norquest bought the old Aleutian Dragon plant in Chignik earlier this year and had eyes on the old McMillan plant in Wrangell but backed out. "There are always going to be challenges from farmed fish, chicken and pork," he said. "We have faith in the business. We're not giving up. We'll just try to do a better job with the products we have."

EXXON DELIVERED ITS APPEAL to the Ninth Circuit Court of Appeals in San Francisco last week, listing some 20 points on which it seeks reversal of the $5.3 billion judgment levied against it by an Anchorage jury in 1994, according to the Anchorage Daily News. Among the points of appeal is Exxon's contention that at least one juror was coerced into agreeing to the guilty verdict. Judge H. Russel Holland rejected the issue of jury tampering in July, but Exxon revealed fresh details last week, including parts of the sworn deposition of the juror in question, Rita Wilson. Plaintiffs' attorneys were expected to file their response last week, also. The court is expected to take up the appeal next spring.

State trims Kachemak silver fishery

By TOM KIZZIA
Daily News Peninsula Bureau

HOMER — A popular personal-use net fishery for silver salmon in Kachemak Bay was scaled back this week by the state Board of Fisheries because of uncertainty about the strength of wild silver runs in the bay.

But the Fish Board declined to take action on the two biggest controversies it faced. One was a proposal to limit the number of halibut charter boats in the area, and the other would have limited the number of immature king salmon caught by a new and growing winter sportfishery in Homer.

Instead, the board sent both ideas to committees for further work.

Biologists said they fear the bay's wild silver salmon runs may be weakening, citing two years of relatively small catches in the August personal-use fishery. The board responded by cutting the annual harvest in half.

Board members said the smaller harvest would probably consist mostly of early-run hatchery silvers returning to the Homer Spit, with fishing wrapped up by the time wild runs return bound for streams at the head of the bay.

The board's action upset some personal-use fishermen, who said it would eliminate fishing at traditional sites away from the Homer Spit. They called on the state to fund studies of the bay's wild runs rather than close fishing because of a "vague worry" that the wild runs are weak.

The mid-August setnet fishery for silvers in Kachemak Bay dates from statehood and the early days of subsistence politics. Local setnetters, who catch small numbers of the salmon for food, went to court in the 1970s, eventually affirming their right to be considered subsistence fishermen under the Alaska Supreme Court's 1985 Madison decision.

But they subsequently surrendered their claim to a subsistence priority, settling for a personal-use fishery with no priority over commercial and sportfishing, said Larry Smith, a Homer builder and activist involved in the Madison case.

"We had made peace around this bay," Smith said. "Our whole deal we struck with the Legislature was that we didn't want to be a priority fishery. We wanted to be a parity fishery." He said the board's action this week violated the spirit of that agreement because it didn't restrict sportfishing on wild silvers.

The board said personal-use net fishing should halt once the harvest reaches a range of 1,000 to 2,000, down from a range of 2,500 to 3,500.

Fish and Game biologist Lee Hammarstrom said the risk of overharvesting wild salmon has increased lately with a large influx of settlers at the head of Kachemak Bay. Several Russian Old Believer settlements have been established there in the past two decades.

Please see Page B-2, FISH BOARD

FISH BOARD: State trims Kachemak silver fishery

Continued from Page B-1

Smith said personal-use fishermen will urge the Legislature to fund studies of the area's small runs to give the board more data in the future.

"It's just a vague fear. But (recommendations of) preventive cuts are appropriate from a biologist if he doesn't have biological information," Smith said. "It's a policy that's creeping more into board policies."

The Fish Board voted not to impose limits on the growing Kachemak Bay fishery targeting immature king salmon from the Pacific Northwest. Instead, the board will create a task force to explore capping the catch of migrating "feeder" kings in the entire northern Gulf of Alaska.

The Fish Board decided to take up the issue again next October after drawing other sportfishing ports such as Seward and Kodiak into the planning process.

Sportfishing guides testified that the Homer catch of feeder kings in winter is too small to have much biological impact. Biologists said some 1,500 kings were caught by trolling in the bay each winter, most of them coming from British Columbia and the Pacific Northwest.

Smaller numbers of feeder kings are caught by anglers elsewhere. But in Kodiak, commercial fishermen catch as many as 20,000 feeder kings as bycatch while fishing for pinks, according to Department of Fish and Game biologist Nicky Szarzi.

Board members said they fear the harvest of nonlocal kings could complicate ongoing U.S.-Canada fishing treaty negotiations.

The areawide approach is similar to that already in the works for federal-state management of halibut fishing.

At its meeting this week, the Fish Board tabled a proposal from Homer halibut charter boats to begin a process that could limit future entry into the charter fishery, saying more work needed to be done to create an areawide consensus. They cited the need to address private vs. charter conflicts and to agree on boundaries and allocations for different areas.

Charter skippers said a moratorium on new guides would be a way to keep the sport harvest of halibut under a limit set in the future by federal regulators. But Phil Cutler of the Alaska Sportfishing Association opposed the proposal, saying he spoke for charter boat customers who feared prices would rise in a limited market.

Reporter Tom Kizzia can be reached at tkizzia@adn.com.

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NOVEMBER 19, 1998
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KODIAK DAILY MIRROR
NOVEMBER 19, 1998

Special city council meeting on sea lion

By DAN JESSUP
Mirror Writer

The Kodiak City Council will hold a special meeting Friday, Nov. 20, at 12 p.m. in the city conference room.

The purpose of the meeting is to consider Resolution 98-30, requesting mitigation of proposed sea lion protection measures in the Gulf of Alaska.

If adopted by the council, the resolution would "call upon the Alaska Congressional delegation, the governor of the State of Alaska, the Alaska State Legislature, and the Secretary of Commerce to urge the National Marine Fisheries Service to (1) refrain from any additional regulation of the fishing industry unless jeopardy is proven through scientific research programs, (2) if jeopardy is proven, reduce the scope of the proposed RPA's (reasonable and prudent alternatives) to only those rookeries and haul-out areas which have had Steller sea lion populations of 200 or more animals within the past eight years, (3) adopt seasonal restrictions rather than year-round restrictions, to reflect the fact that Steller sea lions do not inhabit all rookeries and haul-out areas on a year-round basis, and (4) develop a research program designed specifically to determine the effectiveness of such RPAs."

The Kodiak Island Borough adopted a similarly worded resolution on Nov. 3.

This meeting will be open to the public.

For additional information, call the city clerk's office, 486-8636.

The Vanguard
November 18, 1998
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Opinion

Letters to the editor

Did the spill reach Anchorage?

Today I received in the mail a registration brochure titled "Legacy of an Oil Spill 10 Years after Exxon Valdez." What caught my eye is that it is going to be held March 23-26, 1999, in Anchorage. Some of the topics that will be covered during this symposium are the status of resources injured by the spill; has recovery been achieved; how have natural resources been restored; and the obvious, what lessons have been learned. My question is why Anchorage? The spill happened outside Valdez in Prince William Sound. If any community should be holding the 10-year anniversary, I believe it belongs to Valdez and the communities within Prince William Sound; more specifically, Tatitlek and Chenega. I have a hard time with a symposium being held to evaluate what happened from the oil spill, and what has been done to restore the natural resources at the Egan Center in downtown Anchorage. And for a special price you can sleep in comfort at the Hotel Captain Cook. At the end of the symposium, you can opt for a special tour to Seward where you can choose from two tours: one being the Alaska SeaLife Center and the other the Gray Whale Watch Tour. How does driving from Anchorage to Seward to view a SeaLife Center or watch whales teach us what has happened in 10 years?

If I could arrange this symposium I assure you it would be held in Valdez with wonderful tours to the areas that were affected by the spill. I assure you I would learn more about the spill and the 10 years after from sightseeing Prince William Sound and the areas affected than listening to some presenter inside the Egan Center in downtown Anchorage.

Annalisa Delozier
Valdez

THE STAR
NOVEMBER 18, 1998

Letters To The Editor

Celebrating The Spill Out Of Town

Editor;

Today after I received in the mail a registration brochure titled "Legacy of an Oil Spill: 10 Years after Exxon Valdez." What caught my eye is that it is going to be held March 23-26, 1999, in Anchorage.

Some of the topics that will be covered during this symposium is the status of resources injured by the spill; has recovery been achieved; how has natural resources been restored; an the obvious, what lessons has been learned.

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I have a hard time with a symposium to evalue what happened from the oil spill, and what has been done to restore the natural resources, being held at the Egan Center in downtown Anchorage, and for a special price you can sleep in comfort at the Captain Cook.

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I assure you that would learn more about the spill and the 10 years after from sightseeing Prince William Sound and the area affected then listening to some presenter inside the Egan Center in downtown Anchorage.

Annalisa DeLozier
Valdez

Bowl Is Back

Editor;

I would like to thank the "Halloween Bowl Bandits" for returning my large stainless steel bowl.

The bowl has many good stories and now you have added one more to it. Thank you.

Nancy France
Valdez

KODIAK DAILY MIRROR
NOVEMBER 17, 1998

Men plead guilty in sea lion shooting

By SUE JEFFREY
Mirror Writer

Two Kodiak residents charged with shooting a Steller sea lion pled guilty in U.S. District Court in Anchorage this month.

Kendall Peterson, 33, and his crewman, Todd Van Rossen, 26, were charged with the violation after National Marine Fisheries Service officers found a dead sea lion with several bullet holes washed up on a beach near Peterson's setnet site on the west side of Kodiak Island.

"We know this occurs," said Ken Hansen, NMFS assistant special agent in charge. "We do get occasional reports from (the fishing) industry; industry needs to help us deal with these bad eggs ... human caused mortality is something we can't tolerate."

NMFS officers learned of the incident from witnesses who reported more than two sea lions were shot. One was recovered and bullets extracted from the sea lion matched the rifle in Peterson's possession.

Peterson and Van Rossen both pled guilty to shooting one sea lion. "One is as good as a dozen for sentencing," Hansen said. "The agency has taken every action it can to aggressively investigate this high-priority case."

The Steller sea lion is listed as an endangered species in the westward region of Alaska — from Cape Suckling in Prince William Sound westward — because populations have dramatically declined over the past several years. Shooting a sea lion violates both the Marine Mammal Protection Act and the Endangered Species Act.

The shooting gives the fishing industry a black eye at an especially vulnerable time. Simultaneous to the court case, NMFS is considering escalating steps to protect the Steller sea lion population in the Gulf of Alaska and Bering Sea. Citing the continued decline in populations, NMFS marine mammal biologists recently proposed closing vast areas in the Gulf and Bering Sea to groundfish trawling, traditional fishing grounds used by fleets based in Kodiak, Seward, Sand Point and King Cove.

Biologists say they are complying with the Endangered Species Act which prohibits federal fisheries managers from opening fisheries if they place endangered species at risk.

But elected officials in Kodiak and around the state passed resolutions opposing the closures until NMFS demonstrates through scientific research that fishing is contributing to the decline in the sea lion population.

Hansen of NMFS said his agency is "not unsympathetic to fishermen who compete with sea lions for the resource.

"The law does allow escalating types of deterrents — seal bombs, verbal harrassment, running around your net in your skiff — but you can't kill them," he said.

Peterson was the person who shot the sea lion, said the federal prosecutor handling the case, but added Van Rossen was equally responsible for the shooting.

"Van Rossen was the guy who drove the boat," said Crandon Randell, Assistant U.S. Attorney. "He herded them; he was the one steering the boat."

Peterson and Van Rossen each face a maximum penalty of one year in jail and $100,000 fine for the shooting, classified as a misdemeanor. Peterson, a convicted felon, also could serve a maximum 10-year jail sentence and $250,000 fine for a felon in possession of a firearm, also a felony .

Sentencing provisions under the Marine Mammal Protection and the Endangered Species acts also allow the courts to forfeit guns, boats and any equipment used in the crime. But whether that is part of the sentence is up to the court, Hansen said.

Peterson's sentencing hearing is set for Jan. 28. Van Rossen's has not been scheduled.

THE PENINSULA CLARION
NOVEMBER 17, 1998

Board of Fish schedule hard to predict

By DOUG LOSHBAUGH
Peninsula Clarion

The Alaska Board of Fisheries has been meeting in Homer since Friday on Cook Inlet finfish issues, but because of the way the board is conducting its business, it is difficult to predict when the board will act on particular regulatory proposals.

Laird Jones, the board's executive director, said the board has broken into committees to discuss specific issues and proposals. It held committee meetings Friday, then dealt with Yukon River issues Saturday. On Sunday, it heard public testimony and took Fish and Game advisory committee reports.

Monday, it again broke into committees, which Jones expected to meet all day. He didn't expect the full board to begin acting on proposals until midmorning today.

Which proposals it takes up first depends on which committees finish first, he said.

On the Homer agenda are proposals to restrict Cook Inlet halibut charter boats and to place a moratorium on new entry to the Cook

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Board

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Inlet charter halibut fishery.

In addition, Ninilchik organizers have formed a committee of charter skippers, commercial fishers and unguided sport fishers to write a plan to resolve conflicts between competing users of Cook Inlet halibut. The state board has agreed to screen such plans for the federal North Pacific Fishery Management Council, which has authority over allocation of halibut between competing groups. The Ninilchik committee hoped for a change to address the state board in Homer and seek direction from it.

Other proposals on the board's Nov. 13-18 Homer agenda include:

- A proposal to allow use of commercial drift gillnets for sockeye salmon in Resurrection Bay.
- A proposal to adopt criteria the board can use in deciding whether to create special management areas — such as catch-and-release or fly-fishing-only areas — for Dolly Varden and Arctic char.
- A proposal to close the commercial herring season in the upper subdistrict of Cook Inlet.
- A proposal to allow the Alaska SeaLife Center to harvest up to 14,000 pounds of capelin and 3,000 pounds of sandlance from Cook Inlet each year as feed for captive animals.
- A proposal to prohibit the use of gillnets in upper Cook Inlet commercial and personal-use fisheries for smelt.
- Proposals to open an area just outside Seldovia Bay to subsistence fishing for salmon.

KODIAK DAILY MIRROR
NOVEMBER 16, 1998

Feds study Cook Inlet water quality

KENAI (AP) — Scientists with the U.S. Geological Survey are planning three years of testing on streams and wells in the Cook Inlet area. The effort is part of a national water quality check that has been expanded to include Cook Inlet.

The National Water-Quality Assessment began in 1991 and combines studies of water chemistry, geology and biology to evaluate water supplies. The Cook Inlet basin was added to the study last year.

The main issues around Cook Inlet are increasing residential use, intense recreation, and logging, said Steve Frenzel, head of the Cook Inlet study.

For the first two years here, the Geological Survey scientists focused on planning and review of existing information. In 1999, surveyors will move out into the field for three years of "high intensity monitoring" of streams and wells.

The hydrologists will sample 15 sites around the region and focus intensive studies on six. These are two on the Kenai River (by the outflow of Skilak Lake and by the Soldotna bridge), one on the Ninilchik River, two in Anchorage and one at the Deshka River in the Susitna Valley.

They will also coordinate with businesses, organizations and other agencies on other study sites, including work with the Kenai National Wildlife Refuge and with Usibelli Coal Co., which has a mine site near Palmer.

On the Kenai River, the team will look at the impact of recreation. At Ninilchik, they will evaluate logging effects.

The study team also plans to examine ground water, testing 25 wells used by area residents.

The hydrologists will work with biologists who evaluate fish and aquatic insects for insights into the long-term health of waterways. They will use satellites to view inaccessible drainages, remote sensors to get instantaneous reports from flood gauges, and high-power computing to handle data more quickly.

The Cook Inlet team will begin reporting its findings in 2001. Final reports are due in 2003.

State aquaculture slows

PETERSBURG (AP) — Over the past decade Alaska's shellfish-farming operations have declined by 20 percent, according to an University of Alaska Anchorage researcher.

The state has 56 aquaculture operations, primarily in Southeast, down from about 70 a decade ago, but the survivors are larger, said Ray Ralound of UAA's Marine Advisory Program.

Last year more than 1 million oysters were produced, along with 30,000 pounds of clams and 5,000 pounds of mussels, he told KFSK radio in Petersburg.

Ralound said a new shellfish hatchery in Seward will help aquaculturists by supplying a local and consistent source of seed oysters, clams and other species.

He said shellfish farmers will be able to cut their costs by up to 40 percent by getting seed from the state hatchery.

KODIAK DAILY MIRROR
NOVEMBER 16, 1998

State to buy Kenai land to preserve habitat

SOLDOTNA (AP) — A fishing guide here has agreed to sell his land along the Kenai River to the state, dropping a fight for permission to build a road across nearby wetlands considered critical to the health of the Kenai River.

Mark Kuwada, a habitat biologist for the Alaska Department of Fish and Game, said the state plans to buy roughly 30 acres from Pat Carter using the last chunk of the $1.2 million Fish and Game received from the criminal settlement after the Exxon Valdez oil spill.

The Department of Natural Resources will own the land. Fish and Game will manage it for habitat protection and keep it in its natural state.

"I'm pleased that we have a resolution," said Janet Kowalski, director of the Habitat and Restoration Division of Fish and Game. "It really is a unique piece of wetlands that definitely relates to the success of the spawning areas right next to it."

But Carter, the landowner, said it wasn't a habitat issue. The real issue was a group of neighbors who didn't want to look down on a new road or a new roof, he said, and used the state's permit review system to block him from building his dream house.

"This was a little road project to somebody's private property," he said, and the whole thing got blown out of proportion.

Because the purchase hasn't closed, Kuwada said he could reveal neither the appraised value of Carter's land nor the agreed-upon price. For tax purposes, the Kenai Peninsula Borough has valued it at $171,000.

Carter said he'll get more than he paid for the land, but given the cost of permits and appeals, he'll lose money overall. And he said the stress of the process had taken a toll on his health.

Carter said he has no problem with controlling development along the river, but if the agencies want to control development, they should develop some overall plan, not do it piecemeal.

"To use the system to try to bankrupt somebody, that's ridiculous," he said. "Private property owners on the river — they can't fight the state."

Former Alaskan sees bear and human interaction in Lower 48 – it's not pretty

By CRAIG MEDRED
THE ANCHORAGE DAILY NEWS

ANCHORAGE – From his new office in Montana, brown bear biologist Chuck Schwartz can see the future, and it's not pretty.

More than 20 years of work as a research scientist for the Alaska Department of Fish and Game on the Kenai Peninsula taught Schwartz the problems bears encounter when confronted by the spread of human civilization.

Still, his return to the Lower 48 came as something of a shock.

As the new research scientist for the Yellowstone Grizzly Bear Study Team, Schwartz spends his time monitoring a population of bears that is truly endangered.

"Yellowstone," he said, "is an island."

It is too small an island to long support a healthy population of brown bears. To survive, the animals must spread their range beyond the island, but everywhere they go they run into trouble.

"It's not the bears that are causing the problem," Schwartz said. "It's the numbers of people that are causing the problem."

Often, the people that Montana grizzlies encounter are sheep ranchers – people with a business to protect. Unfortunately, the bears don't know that.

To a bear, Schwartz said, "a sheep is just a fuzzy, dumb ungulate."

When bears find sheep, they make snacks of them.

"Herders don't like grizzly bears," Schwartz said. They don't need much provocation to kill one.

Yellowstone bears that don't run into sheep herders often meet hikers and campers – with a similar result. Almost everywhere in the West are roads, and roads increase the odds of encounters between bears and people.

For instance, Schwartz said, "logging is not necessarily incompatible with grizzly bears, but logging roads sure are."

Federal land managers in Montana and Wyoming are spending tens of thousands of dollars to obliterate old logging roads as part of an effort to protect bears, but there is opposition. People who use those roads for motorized recreation don't want to give them up.

"Once you create a user group and try to take something away, they scream bloody murder," Schwartz said.

Owners of four-wheelers complain about the loss of wilderness roads. Holders of cheap leases to graze sheep or cattle on public lands around Yellowstone decry efforts at grazing law changes.

Some ranchers, Schwartz said, owe their profitability to public-grazing leases. Take away those leases, he said, and the ranches might become unprofitable. Once that happens, the ranch owner basically faces two choices:

Find a millionaire like business mogul Ted Turner, now a major Montana landowner, to buy the ranch.

Subdivide and start selling.

The latter means death for the bears.

"When land is subdivided, it's gone," Schwartz said. "Ranching in the state of Montana is largely compatible (with bears). It creates large, pretty secure tracks of private land, but 20-acre ranchettes are not compatible with grizzly bears."

Every year there are more of those 20-acre ranchettes to entice people fleeing the Pacific Coast for the wide-open spaces of the mountain West.

"What will happen down here in the future is hard to tell," Schwartz said.

But whatever happens, he added, Alaska needs to pay attention.

Already, Alaska has pulled together a Kenai Interagency Brown Bear Study Team, and the Alaska office of the Audubon Society is trying to thwart further erosion of bear habitat on the Kenai.

The peninsula is an ecological island much like Yellowstone, though as much for geographic reasons as for the crush of human population, said John Schoen, another former bear researcher for the Alaska Department of Fish and Game who's now executive director of Audubon's Alaska office.

A stable population of 250 to 300 grizzly bears survive on about 4,500 square miles of habitat on the Kenai. They are largely cut off from the rest of Alaska's bears.

"In Yellowstone, it's not so easy. It's a lot easier to avoid problems than to try to take something away. The forces down here are so strongly polarized."

Embattled landowner gives up road fight

Carter agrees to sell property to the state

By DOUG LOSHBAUGH
Peninsula Clarion

Soldotna fishing guide Pat Carter signed a contract recently to sell his land by the Kenai River to the state, giving up the fight for permission to build a road across adjacent wetlands to reach it.

Mark Kuwada, a habitat biologist for the Alaska Department of Fish and Game, said the state plans to buy roughly 30 acres from Carter using the last of $1.2 million Fish and Game received from the criminal settlement after the Exxon Valdez oil spill. He hopes to close the purchase within a month. The Department of Natural Resources will own the land, he said. Fish and Game will manage it for habitat protection and keep it in its natural state.

"I think it's a great solution. I'm really happy that it happened," said Steve Beeson, one of several neighboring property owners who fought to block the road.

Biologists have identified wetlands where Carter wanted to build the road as critical to the health of the Kenai River, he said. They are learning that wetlands produce the nutrients that support young salmon.

"We're hoping it goes through quickly, for Pat's sake as well," said Beeson. "I feel badly for him. We weren't targeting him personally. It's habitat. We need to watch areas like that, or they'll get developed, and we'll lose the fish."

"I'm pleased that we have a resolution," said Janet Kowalski, director of the Habitat and Restoration Division of Fish and Game. "It really is a unique piece of wetlands that definitely relates to the success of the spawning areas right next to it."

But Carter didn't see it as a habitat issue. He said the people who opposed the road never attend the meetings about protecting the river.

The real issue was a group of neighbors who didn't want to look down on a new road or a new roof and used the state's permit review system to block him from building his dream house, he said.

"This was a little road project to somebody's private property," he said, and the whole thing got blown out of proportion. "This whole thing put a bad taste in my mouth. I feel like I've been forced to sell it. How would you feel, if you'd been through two years of what I've been through and ended up losing money on it?"

Kuwada said because the purchase hasn't closed, he could reveal neither the appraised value of Carter's land, nor the agreed-upon price. For tax purposes, the Kenai Peninsula Borough has valued it at $171,000.

Carter said he'll get more than he paid for the land, but given the costs of permits and appeals, he'll lose money overall. During the long fight for permission to build the road, he

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...Wetlands

Continued from page A-1

said, he developed an ulcer and blood pressure trouble and had trouble sleeping.

"I've ended up with an empty bank account and a hole in my stomach," he said. "At some point, you've got to say you'll be done with it and move on."

Carter originally sought approval to build nearly a mile of road, extending Cheechako News Drive, off the Kenai Spur Highway near Soldotna and crossing about a half-mile of wetlands. The route followed a platted right of way.

Fish and Game recommended against finding the project consistent with the state and borough coastal management plans, but the borough planning commission and other state departments recommended finding the project consistent, subject to certain mitigation measures. The U.S. Army Corps of Engineers issued a provisional permit for the road. The Division of Governmental Coordination, which coordinates agency reviews, found the project consistent with coastal plans, subject to borough and agency stipulations.

Then several citizens appealed to the Coastal Policy Council, which remanded the project for additional DGC review. Meanwhile, in a separate appeal process, Kowalski said Fish and Game was prepared to elevate DGC's finding to a panel of higher-ups in various state departments.

At that point, Carter stopped the review and agreed to try to negotiate a sale.

"I feel good that Pat Carter went through that effort," Kowalski said. "He could have litigated or stayed in the appeals process. Instead, he stepped aside and negotiated with us."

Carter said he has no problem with controlling development along the river, but if the agencies want to control development, they should develop some overall plan, not do it piecemeal, he said.

"To use the system to try to bankrupt somebody, that's ridiculous," he said. "Private property owners on the river — they can't fight the state."

Beeson said biologists now know more about the river than they did 15 years ago, when the subdivision that includes Carter's land was made. If people had known then how important those wetlands are to the river, he said, they would never have allowed the land to be subdivided.

People have unwittingly allowed considerable habitat damage because they didn't understand the river, he said. Now, as projects arise, agencies must review them, he said.

"The ultimate question is, what's the long-term health of the river going to be?" he said. "Maybe this is the line drawn in the sand. I hope so. It's going to be fish or no fish, tourism dollars or not. Sometimes, individuals have to give up something for the good of the whole."

When the state blocks development, Beeson said, it should pay reasonable compensation to private property owners.

Kowalski said she agrees with Carter that protecting the river project by project is no way to go. The best way to protect the river is on a watershed basis, she said, but Fish and Game has statutory authority only to permit projects one at a time. It tries to cooperate with the Kenai Peninsula Borough to do more, she said.

Kuwada said the $1.2 million in criminal settlement money will be gone after the purchase of Carter's land and conservation easements on private property at the confluence of Soldotna Creek and the Kenai River. Kowalski said the state is seeking new sources of money to continue acquisition of critical habitat.

Meanwhile, Kuwada said the state has discussed asking the borough to vacate the platted right of way for the road, but before pursuing that option, it would discuss the issue with other property owners, he said.

CLARION PENINSULA
NOVEMBER 13-14, 1998

High-tech database planned for information

By SHANA LOSHBAUGH
Peninsula Clarion

A vast computerized database will pool facts about the Cook Inlet region into a cutting edge computer and information technology system so simple that anyone with an Internet connection will be able to use it.

That's the concept behind an ambitious project the state is launching this fall.

The "Cook Inlet Information Management and Monitoring System," or CIIMMS, is supposed to help scientists and regulatory agencies track effects of oil spills and other changes and to give interested citizens direct access to the same information the professionals use.

Organizers plan to set up a section on the Kenai River first, and to have the whole system online by the fall of 2000.

Details will include water quality measurements, weather records, satellite images, land use maps, plant and animal studies and oceanography such as measurements of the sea floor, currents and chemistry.

The geographic area covered is the entire Cook Inlet watershed. It includes nearly all of the Kenai Peninsula, the Anchorage Bowl and the Matanuska-Susitna Valley.

See DATABASE, page A-12

...Database

Continued from page A-1

"It's huge," said Kelly Zeiner from the Alaska Department of Natural Resources.

"This project keeps getting bigger and bigger."

Such a project would not have been possible even a few years ago. Advances in computer power are just beginning to give scientists the technology to pull together so many strands of research and apply them to analyze complex subjects like a watershed ecosystem, she said.

"The watershed approach is a natural evolution in scientific resource management," according to the project description.

Zeiner is helping to coordinate the project's first phase, which began Oct. 1. She came to the peninsula to introduce the CIIMMS to scientists here at the Cook Inlet Regional Citizens Advisory Council workshop Oct. 17 and the Nov. 4 water quality monitoring workshop organized by The Nature Conservancy.

Scientists from the Alaska Department of Environmental Conservation and the Department of Natural Resources are working on the project, with help from the federal Environmental Protection Agency, the U.S. Forest Service and U.S. Geological Survey. They hired Science Applications International Corporation to assist on the project.

Funding comes from a $335,000 grant from the Exxon Valdez Oil Spill Trustee Council.

The first task of the CIIMMS project is a survey to see what potential users want the project to be like. Zeiner is circulating a questionnaire asking about software requirements, desired content and how people want to use the CIIMMS database.

People can get copies of the questionnaire off the oil spill Web site at http://www.oilspill.state.ak.us or by phoning Zeiner at (907) 269-8856.

A Kenai meeting about the project is planned for later in November, with details to be announced soon. A major meeting to analyze user needs is tentatively scheduled for January in Anchorage.

After reviewing the input, the project team will put together a "prototype" portion of the database, focusing on the Kenai River watershed. It plans to complete the Kenai River section in August 1999.

CLARION PENINSULA
NOVEMBER 13-14, 1998

Scientists focus on Cook Inlet waters

Project compares inlet to nation's waterways

By SHANA LOSHBAUGH
Peninsula Clarion

The Cook Inlet basin is one of the world's cleanest, yet the past few decades have brought surging industrial development and population growth to its shores. The effects of those changes on fish, wildlife and human health are little known.

To learn more, the U.S. Geologic Survey (a division of the federal Department of Interior) has added Cook Inlet to a broad national study program.

The program is the National Water-Quality Assessment, called by its acronym, NAWQA. It began in 1991 and combines studies of water chemistry, geology and biology to give a comprehensive overview of the United States' water supply and issues threatening its future.

On Nov. 4, the USGS Cook Inlet basin study team, based in Anchorage, presented its plans at the workshop on water quality monitoring sponsored by The Nature Conservancy in Soldotna.

The main issues around Cook Inlet are increasing residential use, intense recreation and logging, said Steve Frenzel, head of the Cook Inlet study.

The Cook Inlet basin NAWQA study began in 1997. Its first two years focused on

See STUDY, page A-12

...Study

Continued from page A-1

planning and reviewing existing information. In 1999, the USGS will move out into the field for three years of "high intensity monitoring" of streams and wells.

The hydrologists, or water scientists, are going to sample 15 sites around the region and focus intensive studies on six. These include two on the Kenai River (by the outflow of Skilak Lake and by the Soldotna bridge), one on the Ninilchik River, two in Anchorage and one at the Deshka River in the Matanuska-Susitna Valley. They also will coordinate with businesses, organizations and other agencies on other study sites, including work with the Kenai National Wildlife Refuge and with the Usibelli Coal Company near Palmer.

On the Kenai River, the NAWQA team will scrutinize the impact of recreation. At Ninilchik, it will evaluate logging effects.

The study team also plans to examine ground water, testing water from 25 wells used by area residents.

The project differs from past water studies in its broad approach and the technological tools now available.

■ On the Kenai River, the NAWQA team will scrutinize the impact of recreation. At Ninilchik, it will evaluate logging effects. The study team also plans to examine ground water, testing water from 25 wells used by area residents.

The hydrologists will work with biologists who evaluate fish and aquatic insects for insights into the long-term health of waterways. They will use satellites to view inaccessible drainages, remote sensors to get instantaneous reports from flood gauges and high power computing to handle more data more quickly.

The team will begin reporting findings in 2001. It plans to issue a series of technical and nontechnical reports. Final reports from the Cook Inlet basin study are due in 2003.

Nationwide, NAWQA is a huge undertaking. It is looking at more than half the water consumption in the Lower 48 states, divided into watersheds.

The wide scope and standardized methods allow scientists to get a bigger and more detailed picture of what is happening to water at the end of the millennium.

Water issues are becoming crises in many parts of the world and will become more crucial in the 21st century as the human population demands more from a finite world water supply, said Marc Sylvester, one of the national USGS officials who spoke at the workshop.

In many parts of the country, NAWQA scientists are looking at urban and agricultural runoff, erosion and pollutants such as pesticides or petroleum chemicals.

NAWQA research already is yielding results that may have major repercussions. For example, hydrologists find signs that some pharmaceuticals and pesticides, accumulated over time, are starting to disrupt fish reproduction by messing up their hormones.

The Cook Inlet basin team does not expect to find such effects here. The scientists said they hope Alaska's waters can provide a standard of cleanliness for the whole nation and preserve that cleanliness for future generations.

Fisheries managers look at more curbs to protect Steller sea lions

The Associated Press

ANCHORAGE — Fisheries managers hope to have a decision next month on whether to limit pollock fishing in the Bering Sea to protect endangered Steller sea lions.

The National Marine Fisheries Service asked for a special session of the North Pacific Fishery Management Council last week. But when the session began here, the agency didn't have a conclusion on whether fishing is hurting the sea lions.

Without the NMFS ruling, "We're all kind of wondering what we're doing here," said Dorothy Childers, executive director of the Alaska Marine Conservation Council.

There had been wide speculation that NMFS would rule that commercial fishing is hurting the Stellers, and ask for new curbs on the lucrative pollock fishery in the Bering Sea.

In a draft plan last month, NMFS biologists made several proposals to protect the animals, including no-trawl zones around sea lion rookeries and haulouts, breaking the pollock season into three rather than two seasons, and cutting the catch in certain areas.

Since 1975, the Steller population in western Alaska has fallen 80 percent, to about 20,000 animals. Last year, federal authorities ruled Stellers in danger of becoming extinct, despite fishing restrictions already imposed around their rookeries and haulouts in the Bering.

"Can we say for sure that pollock fishing is driving this? No. There is still some uncertainty," said Jim Balsiger, acting regional director of NMFS. "Because pollock is so important, we're trying to be more careful." Balsiger said he hoped to have a recommendation for the council next month.

"Everyone assumes pollock is the problem, but a lot of the science disagrees with that," said Glenn Reid, executive director of the North Pacific Seafood Coalition, an industry group.

A climate shift in North Pacific waters may be reducing the amount of capelin, herring or other prey species available to sea lions, said Andrew Trites, a marine mammal biologist from the University of British Columbia at an advisory panel meeting Nov. 10.

"In the Bering Sea you've got huge removals of fish, and Stellers are going down. But there's no pollock fishing in Prince William Sound and you see the same decline," said Al Geiser, a Kodiak fisherman. "Is this a matter of biology or politics?"

But conservation groups say the circumstantial case against the fishing industry is too strong to ignore.

"We're looking at a species that is in danger of becoming extinct. Two of the largest fisheries in the world are concentrated in that species' critical habitat," said Ken Stump of the American Oceans Campaign. That group, the Sierra Club and Greenpeace sued NMFS in April charging the agency had not acted to protect Steller habitat.

The judge in the case has given NMFS until Dec. 16 to reach a decision about whether commercial fishing is affecting St[illegible].

THE SEWARD PHOENIX LOG
NOVEMBER 11, 1998

JUNEAU EMPIRE
NOVEMBER 13, 1998

RCAC defends itself against oil industry attacks

THE ASSOCIATED PRESS

ANCHORAGE – Accused by oil companies of being unruly and difficult to work with, an oil industry watchdog group that gets funding from the companies has started defending itself.

The Prince William Sound Regional Citizens Advisory Council says it's just doing its job, policing an industry with a poor history of monitoring itself.

The oil shippers who operate in the sound contend the citizens council oversteps its authority and has supported lawsuits against the industry.

But the accusations miss the point, one council board member told the Anchorage Daily News.

"Our priority is safety. Their priority is making money, so I'm not surprised that they're critical," said Michelle O'Leary, who fishes out of Cordova and serves on the council's board. "If we agreed on everything, I doubt we'd be doing our job."

After eight years, Arco Marine Inc., British Petroleum Shipping and SeaRiver (Exxon's shipping company) find little in the citizens council they would like to see applied to other ports in the United States.

"RCAC cannot be held as a model organization should it be seen to be necessary elsewhere," wrote Roger Gale, vice president of the BP Oil Shipping Co.

The council was created after the 1989 Exxon Valdez spill to bring citizen oversight to the Valdez tanker port. The 19-member council of people from towns such as Homer and Whittier, and from groups such as fishing, tourism and aquaculture, oversees a staff and a $2 million annual budget funded by the oil industry.

Among its activities, the council reviews spill cleanup and prevention plans, researches the problem of icebergs in shipping lanes, studies tugboat technology and hires experts to examine oil company procedures.

The citizens council is unusual in that it gets money straight from the industry it monitors.

"It's one of the most dramatic examples of effective citizen participation in environmental policy," said George Busenberg, a researcher at the University of Wisconsin.

Parcel ID: Larsen Bay 10-Acre Parcel
~~Donna Easter, Randy Christensen, and Darlene Naumoff~~
Kodiak Island Borough

Rank: N/A **Acreage:** ~~26.00~~ 10 **Agency Sponsor:** USFWS

Appraised Value: $12,000

Location: Uyak Bay, Kodiak Island

Landowner: Kodiak Island Borough

Address: 710 Mill Bay Road
Kodiak, Alaska 99615

This parcel is located on the eastern shore of Uyak Bay at Brown's Lagoon, east of Amook Island, within the Kodiak National Wildlife Refuge. It is part of the lands conveyed by Koniag, Inc., to the Larsen Bay Tribal Council, and further conveyed to tribal members This parcel was subsequently taken by Kodiak Island Borough for nonpayment of property taxes. The surrounding lands are owned by other Tribal members and by the United States as part of the Kodiak Refuge. This parcel would become part of the refuge as well.

Brown's Lagoon is an especially productive marine estuary, supporting high winter concentrations of seabirds in the upper reaches of the bay. Bald eagles and brown bears concentrate at Brown's Lagoon to feed on spawning fish. Numerous bald eagle nests occur near the properties. A salmon spawning stream runs through the Naumoff parcel, which sits at the very mouth of Brown's Lagoon. The associated riparian habitat is used for nesting by harlequin ducks. A small colony of pigeon guillemots occurs near the property, where they feed in near shore marine waters that also host marbled murrelets, and wintering sea ducks and loons. In addition, Uyak Bay has some of the highest concentrations of sea otters on Kodiak Island. Cultural sites likely exist on the property, but it has not been intensively explored for these sites.

This parcel and surrounding area have been used by residents of the area for subsistence purposes, primarily hunting for brown bear and Sitka black-tailed deer, harvesting salmon, gathering shellfish, and berry picking. The accessibility and natural values of the property give it significant development potential.

Developments have been occurring on a number of these tracts, which are subject to borough taxation. These developments are generally cabin sites used for recreational and subsistence hunting and fishing purposes, often by individuals who purchased them from the original tribal member owners. Continued development in this area could adversely impact water quality and fish and wildlife habitat. The acquisition of this parcel will help to preserve the wilderness, recreational, and subsistence restoration benefits of the Koniag large parcel acquisitions.

RESOLUTION OF THE
EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
REGARDING CERTAIN KODIAK ISLAND BOROUGH TAX PARCELS

We, the undersigned, duly authorized members of the *Exxon Valdez* Oil Spill Trustee Council ("Trustee Council"), after extensive review and after consideration of the views of the public, find as follows:

1.a. In its resolution of December 11, 1995, the Council agreed to provide funding of up to $1 million for the acquisition of lands held by the Kodiak Island Borough at key waterfront locations along Uyak Bay within the Kodiak National Wildlife Refuge as a result of forfeitures for tax delinquency. On June 8, 1998, the Council by motion designated these parcels as meriting special consideration by virtue of their location within the boundaries of a large parcel of land purchased from Koniag Inc. with Council funding.

b. In its motion of June 8, 1998, the Council agreed to authorize funding of up to $645,000 for the purchase of privately owned 10-acre parcels conveyed by the Larsen Bay Tribal Council to Tribal members. This motion designated these as parcels meriting special consideration by virtue of their location within the boundaries of a large parcel acquisition of land purchased from Koniag, Inc. with Council funding.

c. Subject to funding by the Council, three private landowners, the Borough and the U.S. Fish and Wildlife Service have reached agreement to sell and purchase, respectively, four such parcels of lands (hereinafter "four tax parcels."). Under Alaska law, the Borough will pay the prior owner of the parcel it sells any proceeds of sale in excess of the tax delinquency and related expenses.

d. Appraisals totaling $59,000 for these four tax parcels have been approved by the State and federal review appraisers.

e. As set forth in Attachments A and B, if acquired, these small parcels have attributes which will restore, replace, enhance and rehabilitate injured natural resources and the services provided by those natural resources, including providing habitat for bird species for which significant injury resulting from the spill has been documented, providing key marine access for subsistence and recreational uses on the surrounding public lands.

2. Existing laws and regulations, including but not limited to the Alaska Forest Practices Act, the Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammals Protection Act, are intended, under normal circumstances, to protect resources from serious adverse affects from logging and other development activities. However, restoration, replacement and enhancement of resources injured by the *Exxon Valdez* oil spill present a unique situation. Without passing on the adequacy or inadequacy of existing law and regulation to protect natural resources and services, biologists, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill affected area to levels above and beyond that provided by existing law and regulation will have a beneficial effect on the recovery of injured resources and lost or diminished services provided by these resources;

3. There has been widespread public support for the protection of small parcels; and

4. The purchase of small parcels is an appropriate means to restore a portion of the injured resources and services in the oil spill area.

THEREFORE, we resolve to provide funds for FWS to offer to purchase and, if the offer is accepted, to purchase all the seller's rights and interests in the four tax parcels; and to provide funds necessary for closing costs recommended by the Executive Director of the Trustee Council ("Executive Director") and approved by the Trustee Council and pursuant to the following conditions:

(a) the amount of funds (hereinafter referred to as the "Purchase Price") to be provided by the Trustee Council to the United States shall be the final approved appraised value of the respective parcels, totaling $59,000;

(b) authorization for funding for the foregoing acquisitions shall terminate if the respective purchase agreement is not executed by December 15, 1999;

(c) disbursement of these funds by the District Court;

(d) a satisfactory title search is completed by the acquiring government and the Seller is willing and able to convey fee simple title by warranty deed;

(e) no timber harvesting, road development or any alteration of the land will be initiated on the land without the express agreement of the acquiring government prior to purchase;

(f) a satisfactory hazardous materials survey is completed;

(g) compliance with the National Environmental Policy Act; and

(h) a conservation easement satisfactory to the U.S. Departments of Justice and the Interior and the Alaska Department of Law shall be conveyed by the seller to the non-acquiring government.

It is the intent of the Trustee Council that any facilities or other development on the foregoing small parcels after acquisition shall be of limited impact and in keeping with the goals of

restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcels excepting such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to prespill conditions of any natural resource injured, lost, or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 ("MOA") and the Restoration Plan as approved by the Trustee Council ("Restoration Plan").

By unanimous consent and upon execution of the purchase agreement and written notice from FWS and the Executive Director that the terms and conditions set forth herein and in the purchase agreements have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the U.S. Department of Justice to petition the District Court for withdrawal of the Purchase Price and any such additional costs related to closing as are recommended by the Executive Director and approved by the Trustee Council for the four tax parcels from the District Court Registry account established as a result of the Governments' settlement to be paid at the time of closing. These amounts represent the only amounts due under this resolution to the Sellers by the United States from the joint funds in the District Court Registry and no additional amounts or interest are herein authorized to be paid to the Sellers from such joint funds.

Approved at the December 15, 1998 Trustee Council meeting and dated as of the date the last signature below is affixed.

JIM WOLFE
Trustee Representative
Alaska Region
U. S. Forest Service

BRUCE M. BOTELHO
Attorney General
State of Alaska

Robert T. Anderson
Acting Special Assistant to the
Secretary for Alaska
U.S. Department of the Interior

STEVEN PENNOYER
Director, Alaska Region
National Marine Fisheries Service

FRANK RUE
Commissioner
Alaska Department of
Fish and Game

MICHELE BROWN
Commissioner
Alaska Department of
Environmental Conservation

December , 1998

CHANGES FROM 12/8/98 SPREADSHEETS

FY 99 Deferred Projects
Executive Director's Recommendation

New total:	Funded in Aug/Sept	$10,272,200
	Recommended for defers	861,300
	Recommended for bench fees	412,400
		$11,545,900
	Funding target for FY 99	*$10-12 million*

99289	Status of Black Oystercatchers From **DO NOT FUND** to **FUND** (funding for additional studies is not warranted at this time; however, some funds are needed to properly close out the project)	+ $8.6
99361	Graphical Techniques for Synthesis/Communication (SEA) (reduce budget to reflect Trustee Council contribution to symposium presentation and video only)	- $1.2
99381	Status of Seabird Colonies in Northeastern PWS From **FUND CONTINGENT** to **FUND** (overdue report has been submitted)	---
99405	Port Graham Hatchery (revise recommendation to reflect that Chief Scientist's concerns have been addressed)	---

REVISED CHIEF SCI. RECOMMENDATION	REVISED EXEC. DIR. RECOMMENDATION
PROJECT 99289 - BLACK OYSTERCATCHER Funding additional work on black oystercatchers in FY 99 was contingent on evaluating a preliminary report on the status of this species from field studies in FY 98 (Project 98289). I have reviewed the preliminary report, which generally indicates that spill-related effects found previous to 1991 are not now evident, there is no avoidance of oiled areas, and the population and nesting effort of oystercatchers is either stable or increasing in the spill area. Pending completion and review of the final report, it does not appear necessary to fund a second year of studies on this shorebird. However, a small amount of additional funds may be necessary in FY 99 to properly close out this project.	Fund project closeout only (preparation of final report and manuscript, and presentation at 10 Year Symposium). This project was deferred pending a review of FY 98 results (Project 98289), which the Chief Scientist has now completed. The preliminary report indicates that spill-related effects are not now evident and that population and nesting effort is either stable or increasing in the spill area. Therefore, it does not appear necessary to fund additional studies on the black oystercatcher at this time.
PROJECT 99361 - GRAPHIC PRESENTATION (SEA) In general, the application of computer presentation technology has the potential to enhance communication of important synthesis objectives and link multiple elements of the restoration program. The principal investigators are very strong, and the presentation of SEA (Project /320) results at the 1998 Restoration Workshop was an example of how sophisticated scientific information can be conveyed to the public in a compelling fashion. This work needs to be updated and enhanced for presentation at the 10 Years After symposium and recorded in video format for extended use. Fund.	Fund revised proposal, which is scaled down significantly from the original proposal. This project will develop a presentation on SEA (Project /320), one of the Trustee Council's primary ecosystem projects which is closing out in FY 99, for the 10 Years After symposium. In an effort to facilitate broader dissemination of the results of the SEA project, the presentation will be aimed at lay audiences and will include a video version. Fifty copies of the video will be provided to the Restoration Office for dissemination to the public. The principal investigator should provide the Restoration Office an opportunity to review the content of the video at an early stage in its development.
PROJECT 99381 - SEABIRDS/ NORTHEAST PWS This inexpensive project will collect information about the size and composition of several small seabird colonies on lands in western Prince William Sound currently owned by Eyak Corporation that are being transferred into public ownership. This information will be useful as the agencies develop management plans for these lands. Fund.	Fund. This project was deferred pending further review of funding priorities. Because the project is inexpensive and the information will benefit development of appropriate management plans, I now recommend funding in FY 99. The project will collect information on several small seabird colonies located on lands in eastern Prince William Sound that are being transferred into public ownership.
PROJECT 99405 - PORT GRAHAM HATCHERY I have been informed that all necessary permits have been obtained from the Alaska Department of Fish and Game and other agencies and that the Regional Planning Team (RPT) has given its approval to the hatchery. The permits and the RPT process are designed to ensure proper fishery management, including the use of the local wild stock to avoid introduction of fish with exotic genetic makeup or new disease. The results of the planning and permitting process were not included in the Detailed Project Description (DPD) so were not part of my review, but the fisheries management plan approved by the RPT should become part of the DPD. It will provide a record of the specific measures that are in place to guarantee the long-term health of the wild runs of salmon from which the hatchery stock is to be taken and ensure that measures necessary to avoid problems that have negatively affected wild stocks in other areas where hatcheries exist will be avoided. The Trustee Council has been assured by the Alaska Department of Fish and Game that an otolith marking program is in place that will allow differentiation of hatchery and wild run fish, so when the hatchery completes its current brood stock development program, the necessary measures, including stock identification in the potential fishery and enumeration of wildstock escapement, will be implemented. Fund.	Fund, with funding for all but NEPA compliance work contingent on adequate funds from other sources being in place. This project will contribute $725,000 to the $2.2 million reconstruction of the Port Graham hatchery, which was destroyed by fire in January 1998. Funds for the construction phase of the project are also contingent upon NEPA compliance documentation being in place and review and approval by the Alaska Department of Fish and Game of the final engineering plans and specifications for the new hatchery. The Trustee Council has supported the hatchery's programs for several years in an effort to rehabilitate and enhance the pink, coho, and sockeye salmon runs in the Port Graham and Nanwalek areas. The hatchery has provided additional fish for subsistence and commercial use, as well as providing an opportunity to reduce harvest pressure on the wild stocks. [NOTE: If funded, funds for this project will be outside of the regular FY 99 work plan of research, monitoring, and general restoration projects.]

Exxon Valdez Oil Spill Trustee Council

645 G Street, Suite 401, Anchorage, AK 99501-3451 907/278-8012 fax:907/276-7178

MEMORANDUM

TO: Trustee Council

FROM: Molly McCammon
Executive Director

DATE: December 11, 1998

RE: Alaska SeaLife Center Bench Fees

The Alaska SeaLife Center (Center) is requesting consideration of adjustments to the FY98 and FY99 bench fees for the Trustee Council (Council) funded research projects being conducted at the Center. Having completed a partial year of operations, including the first cycle of seasonal visitation and research, actual operating costs of the research portion of the Center are now more fully known. The Center has requested that bench fee charges be adjusted retroactively for FY98, as well as for FY99.

In order to respond to this request, I have reviewed the existing cooperative agreement between the Alaska Department of Fish and Game and the SeaLife Center, the lease documents, and Center cost assumptions. My conclusion is that the current bench fees are based on a 70% subsidy of the cost of FY99 EVOS research projects. My recommendation is that for FY99, the Council pay the full, non-subsidized cost of EVOS research at the Center for an additional cost of $385,300.

Background

The Center's mission relative to research is to subsidize, to the extent reasonably practicable, the cost of conducting EVOS-related research. The Center's staff have now informed us that realistically, the possible level of subsidy must be greatly limited during the start-up years. This is due to short-term cash flow needs resulting from higher "ramp up" costs over a longer period of time than originally anticipated, as well as debt service payments on the City of Seward Revenue Bonds that were required to fully fund the construction of the Center.

The Board of Directors and Board of Governors of the Center have prepared a Finance Action Plan and have mobilized their full resources to implement and accomplish the plan. Early retirement of the revenue bond debt will allow the Center to maintain its mission of subsidizing research costs to the greatest extent reasonably practicable.

Section Z of Cooperative Agreement 95-045 with ADF&G says that "rent to conduct research funded with joint EVOS civil settlement funds... shall not exceed the cost per square foot computed on an annual basis for the research component of reasonable personnel costs and administrative expenses, operations, curatorial, and repair and replacement costs, including reasonable reserves for repair and replacement, but not including costs for depreciation, debt service, or amortization. To the extent that revenues collected from the adjacent public education and visitation components of the Alaska SeaLife Center exceed costs the excess revenues shall be used to the extent reasonably practicable to subsidize the rent for space to conduct EVOS related research."

The Trustee Council approved in August $166,600 in bench fees for seven FY99 projects at the SeaLife Center. Based on staff analysis, the actual cost to the Center for these projects, not including depreciation, debt service, or amortization, is $551,900, a difference of $385,300.

Since the SeaLife Center is taking longer to become fully operational on both the research and visitor sides, and since the cooperative agreement between ADF&G and the Center allows for a subsidy **only** when revenues are in excess of costs, I think it is appropriate to forego any subsidy and pay 100% of actual costs in this fiscal year. These circumstances also apply to bench fees for fiscal year 1998, but going back and retroactively paying additional fees appears to be much more problematic.

We have also been asked to pay the bench fees in a single, up front payment, rather than monthly, if possible. Under state procurement laws, this is permissible with an appropriate finding. In order to maintain some control over final payments however, I recommend that 10-15% of the total bench fee costs be withheld until the last month of FY99. This can be done administratively by ADF&G.

In conclusion, I recommend that the Council adopt the following motion:

MOTION: To approve an additional $385,300 to the Alaska SeaLife Center for bench fees for FY99 projects and an additional $27,100 in general administration to ADF&G for a total of $412,400. This amendment to the negotiated bench fees for FY99 does not reflect any commitment on the part of the Trustee Council for bench fees for FY00, which will be up for total renegotiation at that time.

If you have any questions or would like to discuss the above recommendation, please don't hesitate to contact me.

ALASKA SEALIFE CENTER
FY 99 Bench Fees

Project		Approved Cost	Full Costs Cost	Increase	
99341	Office Space	$3,600.00	$12,000.00	$8,400.00	
99341	Dry Lab 1/2	$9,266.40	$30,888.00	$21,621.60	
99341	Wet Lab	$300.00	$2,157.09	$1,857.09	
99341	ODL	$43,675.20	$145,584.00	$101,908.80	
99341	Tank	$7,776.00	$25,920.00	$18,144.00	
		$64,617.60	$216,549.09	$151,931.49	
99327	Office Space	$900.00	$3,000.00	$2,100.00	
99327	Incubator	$90.00	$90.00	$0.00	
99327	Brooder	$135.00	$135.00	$0.00	
99327	Wet Lab 1/2	$4,001.40	$13,338.00	$9,336.60	
		$5,126.40	$16,563.00	$11,436.60	
99348	Office Space	$900.00	$3,000.00	$2,100.00	
99348	Dry Lab 1/2	$3,088.80	$10,296.00	$7,207.20	
99348	Freezer	$27.00	$90.00	$63.00	
99348	ODL	$16,243.20	$54,144.00	$37,900.80	
99347	Tank	$7,776.00	$25,920.00	$18,144.00	
99348	Tank	$2,592.00	$8,640.00	$6,048.00	
		$30,627.00	$102,090.00	$71,463.00	
99190	Office Space	$1,800.00	$6,000.00	$4,200.00	
99190	Dry Lab 1/2	$5,011.20	$16,704.00	$11,692.80	
99190	Wet Lab 1/4	$8,002.00	$26,676.00	$18,674.00	
99190	Raceways	$6,336.00	$21,120.00	$14,784.00	
99190	Fish Pass	$2,025.00	$6,750.00	$4,725.00	
		$23,174.20	$77,250.00	$54,075.80	
99252	Office Space	$1,800.00	$6,000.00	$4,200.00	
99252	Dry Lab 1/2	$5,011.20	$16,704.00	$11,692.80	
99252	Wet Lab 1/4	$8,002.80	$26,676.00	$18,673.20	
99252	Tank	$15,552.00	$51,840.00	$36,288.00	
		$30,366.00	$101,220.00	$70,854.00	
99441	Office Space	$1,800.00	$6,000.00	$4,200.00	
99441	Dry Lab 1/2	$5,011.20	$16,704.00	$11,692.80	
99441	Freezer	$162.00	$540.00	$378.00	
99441	Veterinarian	$1,776.00	$1,776.00	$0.00	
		$8,749.20	$25,020.00	$16,270.80	
99371	Office Space	$1,050.00	$3,500.00	$2,450.00	
99371	Dry Lab 1/2	$2,923.20	$9,744.00	$6,820.80	
		$3,973.20	$13,244.00	$9,270.80	
		$166,633.60	$551,936.09	$385,302.49	to ASLC
		$11,664.35	$38,635.53	$26,971.17	Agency GA
		$178,297.95	$590,571.62	$412,273.66	TOTAL

ATTACHMENT 1

COOPERATING AGREEMENT
95 – 045

4. Seek specific performance of any term or provision of this Agreement.

Y. **Nonwaiver of rights.** Failure to exercise any rights relating to breach of the Agreement including the right to acquire the Facility and the right of termination or restitution for breach of the terms of this Agreement does not constitute a waiver of those rights for a future or continuing breach.

Z. **Space for EVOS research.** The City shall give priority to research related to the EVOS restoration mission. ADF&G shall have the right to use 4,000 net useable square feet of laboratory and office space for research projects at the Facility. ADF&G shall promptly notify the City when it becomes aware that some or all of its allotted 4000 square feet of space is not required for the remainder of a fiscal year so that the City can attempt to find a replacement for the lost revenue. The rent for space to conduct research funded with joint EVOS civil settlement funds including the 4000 square feet allotted to ADF&G at the Facility shall not exceed the cost per square foot computed on an annual basis for the research component of reasonable personnel costs and administrative expenses, operations, curatorial, and repair and replacement costs, including reasonable reserves for repair and replacement, but not including costs for depreciation, debt service, or amortization. To the extent that revenues collected from the adjacent public education and visitation components of the Alaska Sealife Center exceed costs the excess revenues shall be used to the extent reasonably practicable to subsidize the rent for space to conduct EVOS related research. The City shall meet annually with ADF&G and, for so long as the position exists, the Executive Director to identify the EVOS research needs for space in the Facility and to establish the cost of that space.

AA. **Indemnification.** The City shall indemnify the State and the EVOS Trustee Council according to the provisions described in Appendix 8.

BB. **Insurance.** The City shall procure and maintain insurance according to the schedule in Appendix 9.

CC. **Record retention.** The City shall retain for a period of three years after Final Acceptance of the Facility all contracts, invoices, materials, payrolls, personnel records, conditions of employment, and other data relating to this agreement.

DD. **Inspection.** The City shall allow, in the manner and time ADF&G deems appropriate, upon notice and at reasonable times, ADF&G inspection of the City's facilities, records, and all activities pertaining to this Agreement and to audit all related Project records and data.

ATTACHMENT 2

BOARD OF DIRECTORS
BOARD OF GOVERNORS

ALASKA SEALIFE CENTER
301 Railway • P. O. Box 1329 • Seward, AK 99664
907-224-6349 • Fax 907-224-6360

BOARD OF DIRECTORS

ALASKA SEALIFE CENTER

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BOARD OF GOVERNORS

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Gov. Walter J. and Mrs. Ermalee Hickel
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*Serving alternate term on Board of Directors

ATTACHMENT 3

FINANCE ACTION PLAN

YEAR	1998									1999																							
Month	November					December				January				February				March					April				May					June			
Monday	2	9	16	23	30	7	14	21	28	4	11	18	25	1	8	15	22	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28

Prepare '99 Business Plan

◇ SAAMS Board Annual Meeting Board Development

◇ Business Plan Executive Summary

Establish Line of Credit *$400,000*

Alaska SeaLife Center
Short Term Plan of Finance
Action Plan
December 4, 1998

Accelerate Payments on Existing Pledges *$500,000*

Accelerate Payments on Retail Inventory *$250,000*

Advance Payment on Tour Ops *$150,000*

EVOS Research Fees Adjustment and Prepayment

#552,000, an increase of #385,300

Development/Fund Raising New Pledges Cash-in-Hand

◇$ *$100,000* ◇$ *$500,000*

Long Term Capital Funding Political Action Strategy to Retire Debt 1999, 2000, 2001

On Going Analysis of Bond Holder Requirements, and Balance of funds in Renewal & Replacement Fund, Termination Fund and Quasi-Endowment Fund

Month	November	December	January	February	March	April	May	June
Accumulative	*$400,000*	*$900,000*	*$1,150,000*	*$1,696,659*	*$194,659*	*$2,446,659*		