

# ID # 920604101 -01

	COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS	
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RANKING	H M L Rank Within Categories .	
	H M L Rank Overall	
	Project Number - if assigned	,

#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

#### YES NO UNKNOWN

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	 ******		_				-	-				•

\_\_\_\_\_ 2. Technical feasibility.\*

2. Consistency with applicable Federal and State laws and policies.\*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

# . 01

#### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

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Extoria "Sinking fund" to Costinie payment ustification: (Link to Injured Resource or Service) for Restoration beyond 2						
see pages 4,5	of proposal					
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mated Duration of Project:	or Zoyears					
•	not administrative - laws in					
	to extend fund.					
ner Comments:						
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ne, Address, Telephone:						
erone Komisar						
President	Oil spill restoration is a public process. Your ideas					
202 Buth will Bloc.	and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to					
Fairbanks Ax	them.					
1 99775						
474-7311						



# UNIVERSITY OF ALASKA STATEWIDE SYSTEM FAIRBANNS. ALASKA 99775-8560

Document ID Number

930604101

1 A-92 WPWG

B-93 WPWG

C-RPWG

D-PAG

E-MISC.

### FAX COVER SHEET

TO: EXXON Valdez Oil Spill Trustees	
FAX Number: 276-7178	
Telephone Number: 278-8012	
FROM: President Jerome Komisar	
Location: University of Alaska	
FAX Number: 474-7570	
Telephone Number: 474-7311	
Number of Pages: 7 + cover page	
Comments:	

page (



Jerome B. Komisar

#### UNIVERSITY OF ALASKA STATEWIDE SYSTEM

202 BUTROVICH BLDG.
FAIRBANKS, ALASKA 98775-5560
PHONE: 474-7311
FAX: 474-7570

June 4, 1992

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Document ID Number

920604101

A-92 WPWG

B-93 WPWG

C-RPWG

D-PAG

E-MISC.

Exxon Valdez Oli Spill Trustee Council 645 G Street Anchorage, Alaska 99501

Re: Exxon Valdez Oil Spill "Restoration Framework" and "1992 Workplan"

#### Dear Trustees:

I have had a chance to review your reports, "Exxon Valdez Oil Spill: Restoration Framework" and "Exxon Valdez Oil Spill: 1992 Workplan," and appreciate the hard work and thought that underlie your plans. I am, however, concerned that an eight-year program is too short, given coastal life cycles. A longer time is needed for the restoration of the coastal areas affected and in order to complete a comprehensive analysis of the spills' impact.

The Trustee Council's and Restoration Team's dedication to early action focused on damaged species and habitats is commendable. Such action must be a major focus during the initial stages of recovery. Nevertheless, it appears to me that the recovery time, cost of restoration and monitoring need not be directly tied to damage settlement payments. Deriving a framework that matches restoration efforts with actual recovery, and one which grows - In contrast to temporarily hiring expertise is a major challenge and I suggest it receive greater consideration in the Restoration Framework and the Work Plan. In order to lengthen the time available for restoration and research, you might want to consider two suggestions:

First, provide for a portion of the settlement payments being placed into an endowment trust. The endowment need not be perpetual, but structured so funds are available for at least 20 - 30 years. A sinking fund structure, using increasing annual deposits during the period of Exxon payments and taking advantage of fund earnings, is outlined in the first attachment to this letter.

Exxon Valdez Oll Spill Trustee Council page two
June 4, 1992

920664101 1 A-92 WPWG 1 B-93 WPWG 1 C-RPWG 1 D-PAG 1 D-PAG 1 E-MISC.

Second, provide for an institutional arrangement that ensures the availability of experts - marine scientists, ecologists, oceanographers, fisheries experts - for the time it will take for the habitat to heal and analyses to be completed. A possible approach is outlined in the second attachment.

I, of course, would be pleased to discuss these suggestions with you.

Sincerely,

Jerome B. Komisar

- Stomen

President

JBK:dfm Enclosures

# Proposed New "Potential Restoration Option" University of Alaska June 4, 1992

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The University of Alaska proposes that the Trustee Council add another Potential Restoration Option to the Restoration Framework, within a new approach category called "Fiscal Management of Restoration." Adoption of this option will enhance the effectiveness of the overall restoration program by allowing the Trustees to match the restoration process to the needs of damaged systems, species and habitats beyond the period of settlement receipts.

The University believes maximal management of the restoration process requires that more attention be devoted to planned management of the Trustee's financial assets, and to long-term planning for restoration activities for at least 20-30 years.

#### Fiscal Management of Restoration

OPTION 36:

Establish and endow a sinking fund and associated foundation for long-term restoration activities, including research, monitoring and capital projects.

APPROACH CATEGORY:

Fiscal Management of Restoration

INJURED RESOURCES AND SERVICES: Habitate expected to exhibit chronic presence of hydrocarbons (eg: intertidal and subtidal), and long-lived organisms, including sea otters, harbor seals, killer whales, common and thick-billed murree, bald eagles and others.

#### BACKGROUND AND JUSTIFICATION:

The Trustees to date have been unable to devote significant attention to assuring that the restoration process continues for a sufficient period to match the actual recovery time of damaged resources. The restoration needs of injured resources will not be fully met unless the entire restoration process is explicitly planned to occur over a longer period than the payments from Exon. In addition, creation of a foundation-like institution will establish continuity throughout the restoration process, and will enforce coordination

Restoration Option
University of Alaska
Page 2

among agencies and academic institutions participating in the foundation. Properly structured, the foundation would largely uncouple the long-term recovery of natural processes from shorter term political processes, to the benefit of injured resources. Finally, properly managed, a foundation/sinking fund, will provide significantly greater funds for restoration than would current spending of settlement proceeds.

# DOCUMENT ID Number 220604101 A-92 WPWG B-93 WPWG C-RPWG D-PAG D-PAG D-E-MISC.

#### **ACTION:**

• Establish a foundation with a specified management structure comprised of Trustees and representatives of academic and public-interest institutions. Determine and specify the method the foundation shall use to apply settlement funds to restoration options over time, the bylaws of the foundation, and the methods the foundation shall use to carry out restoration. The mission of the foundation will be completely integrated with the restoration plan, and will be focused upon completion of restoration research, monitoring and capital projects after cessation of settlement payments.

#### INFORMATION NEEDED TO IMPLEMENT OPTION:

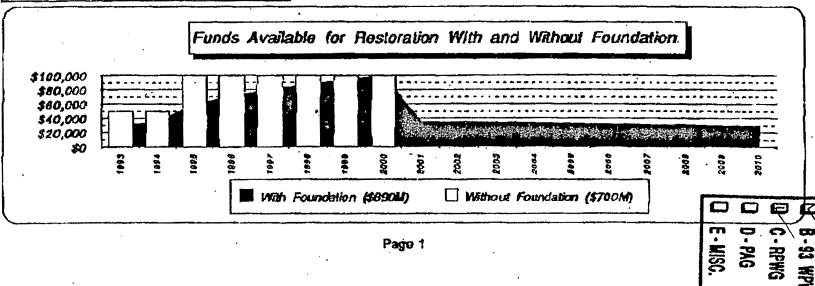
Completion of the pending reviews a critical syntheses of the scientific literature on the recovery of marine mammals, marine birds, commercially important fish and shellfish, and invertebrates will provide the basic framework for designing this option. In addition, additional reviews and critical syntheses of scientific literature of affected natural systems may be necessary, insofar as the pending reviews are inadequate in this regard.

Attachment: Sample case describing extension of restoration investment over a 20-year period.

pages

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Beginning Balance		\$20,900	\$38,561	\$84,834	\$123,934	\$156, <del>3</del> 75	\$184,894	\$208,485	\$228,420
Deposit	\$20,000	\$20,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
Earnings	\$1,550	\$3,170	\$8,883	\$10,450	\$13,480	\$16,041	\$18,204	\$20,033	\$17,703
Inflation Proofing	\$900	\$1,841	<b>\$</b> 3,985	\$6,088	\$7,827	\$9,314	\$10,570	\$11,632	\$10,279
Net Available	\$650	\$1,329	\$2,878	\$4,382	<b>\$</b> 5,853	\$6,727	\$7,634	\$8,401	\$7,424
Foundation Operations	\$7	\$13	.\$29	\$44	\$57	\$67	\$76	\$84	\$74
Foundation Research	\$644	65,496	\$10,562	\$21,305	\$30,383	\$38,054	\$44,536	\$50,014	\$35,902
Fund Balance	\$20,900	\$38,561	\$84,834	\$123,934	\$156,975	\$184,894	\$208,485	\$228,420	\$210;146
With Foundation (\$890A	330,644	\$35,496	\$60,582	\$71,305	\$80,383	. \$88,054	\$94,536	\$100,014	\$35,902
Without Foundation (\$7	\$50,000	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0
Componestion	\$50,000	\$50,000			•	,			
Other Besteration	\$30,000	\$30,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

	Assumptions: (% of fund Belance)	•	XEOUT MONTH	\$700,000	\$3,870
_		Operations 1.00%	POST_2010		
		Drawdown 20%	8		



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\$35,314	\$34,700	\$34,057	\$33,387	<b>\$</b> 32,685	\$31,953	\$31,187	\$30,387	\$29,551	80000
\$191,050	\$171,095	\$150,242	\$128,450	\$105,678	\$B1,881	\$57,013	\$31,026	\$3,870	
\$35,314	\$34,700	\$34,057	\$33,387	\$32,685	\$31,953	\$31,187	\$30,387	\$29,551	\$530,118
\$68	<b>\$62</b>	\$56	\$49	\$42	\$34	\$27	\$19	· \$10	. \$817
\$5,830	\$6,209	<b>\$5,</b> 561	\$4,883	\$4,175	\$3,435	\$2,661	\$1,853	\$1,008	\$81,692
\$9,457	\$8,597	\$7,899	\$6,761	\$5,780	. \$4,756	\$3,685	\$2,566	\$1,396	\$113,111
\$16,286	\$14,808	\$13,260	\$11,644	\$9,955	\$8,190	\$6,346	\$4,419	\$2,405	\$194,803
\$210,146	\$191,050	\$171,085	\$150,242	\$128,450	\$105,678	\$81,881	\$57,013	\$31,028	<b>8340</b> ,00 <b>0</b>
2002	2003	2004	2005	2006	2007	2008	2009	2010	Totals

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9 A- \$2 WPWG

9 C- RPWG

10 D-PAG

10 E-WISC.

# Proposed Institutional Structure of Restoration Foundation University of Alaska June 4, 1992

Occurred 10 Number 92060410/

Q A- 92 WPWG

B-93 WPWG

O C - RPWG

O D-PAG

O E-MISC.

#### Directors:

Two Federal Restoration Trustees or their designees.

Two State of Alaska Restoration Trustees or their designees. The President of the University of Alaska or his designee.

The President of the University of Washington or his designee.

A public member appointed by the President.

A public member appointed by the Governor.

A public member appointed by the National Academy of

#### Limitation of Foundation Staff/Operating Expenses:

Two percent of foundation balance annually.

#### Authorized Uses of Foundation Funds:

Restricted to the uses authorized to the Restoration Trustees, to exclude habitat acquisition.

Funds must be applied according to the restoration plan in place when the last settlement payment is received.

#### Investment and Draw-down of Sinking Fund Endowment:

Funds to be transferred to foundation according to specified schedule determined by the Restoration Trustees when the foundation is created.

Funds to be applied to restoration projects on a sinking fund schedule similarly determined by the Trustees.

Funds to be invested in government securities and inflation proofed according to rules similarly determined by the Trustees and incorporated in the foundation by-laws.

#### Authority of Foundation Directors:

Foundation Directors shall provide for continuity in the restoration process through:

Annual revision of the restoration plan.

Contracting with agencies and institutions to accomplish restoration options, research and monitoring in a manner that insures continuity of individual and institutional expertise.

## ID # 920615287-02

	COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS	
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	category	,
	Lead Agency	
	Cooperating Agency(ies)	
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RANKING	H M L Rank Within Categories	•
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	Project Number - if assigned	

#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

#### YES NO UNKNOWN

_			1.	Linkage to re	sources and/or	services	injured b	by the	Exxon	Valdez oil	spill
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\_\_\_\_\_ 2. Technical feasibility.\*

3. Consistency with applicable Federal and State laws and policies.\*

Comments:

Endowment

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

#### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Endowment Proposal II - Larger
· · · · · · · · · · · · · · · · · · ·
Justification: (Link to Injured Resource or Service)
To provide a fund for future restoration work
Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
Provide a source of Funding to allow continued
restoration activities begand the Exxon payout period.
Good 240 mil End
· · · · · · · · · · · · · · · · · · ·
•
Estimated Duration of Project: Fund for 10 gears
Estimated Cost per Year:
Other Comments:
•
Name, Address, Telephone:
Peg Kehrer
Alk Dept of Fish & Game Oil spill restoration is a public process. Your ideas
P. O. Boy 3-2000 and suggestions will not be proprietary, and you
Toncou Ale 98802-2000 will not be given any exclusive right or privilege to them.

TO TO TO TO TO

Title: Endowment Proposal II - Larger Endowment for Restoration

Justification: A permanent fund will be needed for oil spill restoration activities for a variety of reasons:

Natural recovery is not likely to be complete for all injured resources within the next ten years. Monitoring of natural recovery and of the long-term impacts of restoration implementation projects on recovery will certainly be needed beyond this time.

If facilities of any kind are built to aid restoration efforts, operations and maintenance costs will likely extend beyond ten years.

There may be long-term restoration projects, with attendant administration costs, beyond ten years.

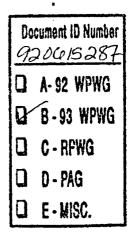
It may be desirable to spread acquisition costs for habitat over more than ten years. Additional costs of managing lands which may be acquired will continue forever.

To reach a fund of \$240 million by March 2003, the Trustees could deposit to an endowment fund in this manner (10% simple interest rate assumed):

Dec. 1992 - \$50 million, 1993 through 2001 - 7 million each year. If half of yearly interest were available for use from 2003 on, then approximately \$12.5 million would be available for restoration use each year.

Cost - undetermined costs of administration of fund.

Peg Kehrer Project Assistant Alaska Department of Fish and Game P.O. Box 3-2000 Juneau, AK 99802-2000



# ID # 920615287 -01

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RANKING	H M L Rank Within Categories	
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	Project Number - if assigned	

#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

#### YES NO UNKNOWN

- \_\_\_\_\_. 1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
- \_\_\_\_\_ 2. Technical feasibility.\*
- 3. Consistency with applicable Federal and State laws and policies.\*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

#### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: 2	
Endowment Propose	1 I - minimum
Justification: (Link to Injured Resource or Se	rvice)
To Brouide a fund for futu	
•.	es, location, rationale, and technical approach)
	fond the Exxon payout
Goal 75 mil Eunu	·
	•
Estimated Duration of Project: Fund for	10 years
Estimated Cost per Year:	
Other Comments:	
Name, Address, Telephone:	
AK Dept of Fish & Game P.O. Box 3-2000 Juneau Ak 99802-2000	Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to
907 465 4125	them.

Title: Endowment Proposal I - Minimal Endowment for Restoration

Justification: A permanent fund will be needed for oil spill restoration activities for a variety of reasons:

Natural recovery is not likely to be complete for all injured resources within the next ten years. Monitoring of natural recovery and of the long-term impacts of restoration implementation projects on recovery will certainly be needed beyond this time.

If facilities of any kind are built to aid restoration efforts, operations and maintenance costs will likely extend beyond ten years.

There may be long-term restoration projects, with attendant administration costs, beyond ten years.

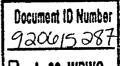
It may be desirable to spread acquisition costs for habitat over more than ten years. Additional costs of managing lands which may be acquired will continue forever.

To reach a fund of \$35 million by March 2002, (year following the last year of Exxon payments), the Trustees could deposit to an endowment fund short term deposits for the period between the time money was made available to the court by Exxon and the time at which money is disbursed for restoration projects. Interest would accrue for an average of six months each year - approximately, September 1 (deposit) to March 1 (disbursement of funds in the following year), except in 1991 which is December 1, 1991 to March, 1992. (10% interest rate assumed).

Deposits could be made on this schedule: Interest on deposits from 1991 and 1992 - \$4.8 million, 1993 - \$2 million, 1994 through 2002 - \$1.4 million each year. If half of the yearly interest were available for use from March 2002 on, then approximately \$1.76 million would be available for restoration use each year.

Cost - undetermined costs of administration of fund.

Peg Kehrer Project Assistant Alaska Department of Fish and Game P.O. Box 3-2000 Juneau, AK 99802-2000



- A-92 WPWG
- B-93 WPWG
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- ] E-WISC.

#### Critical Factors

$\bigcirc$	
Potential pro	jects must meet all of the following to be considered further. Check the blank for "yes", known".
YES NO U	NKNOWN
<u></u>	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
<i>_</i>	2. Technical feasibility.*
	3. Consistency with applicable Federal and State laws and policies.*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

# EXXO VALDEZ OIL SPILL TRUSTEE (NCIL

Document 10 Number 9 2061 5279

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

	92 WPWG
ENDOWMENT FUND TO SUPPORT RESTORATION ACTIVITIES	93 WPWG
Justification: (Link to Injured Resource or Service) To assure the continuance of activities as needed in the furire.	-PAGn - MISC.
Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)	
To establish a restoration endowment or trust fund using available proceeds	
from Exxon.	
Ensuring that the spill-affected area will recover fully from the Exxon Valdez oil spill is a complex, long-term task that involves many interests, significan	ıt
funding and much initial uncertainty. There will be a continuing need to identify, protect, and manage key habitat areas in the future. Monitoring of natural recovery and the efficacy of restoration activities will be needed. Restoration activities will be implemented as injury and technical information indicate. Continued research into the effects of the spill will help the	
development of improved clean-up methods. In making a long-term commitment to the oil spill environment, it is important to recognize the need for	
continuing financial support. Contributions from Exxon for restoration	
activities terminate in 2001; the Trustees may consider spending mechanisms that will continue that support after 2001.	
Estimated Duration of Project: 10 years	
FY 93 5M, FY 94 8M, FY 95 10M, FY 96 11M, FY 97 to 2001 12M per year	
Other Comments: This proposal addresses Option 32 in the Exxon Valdez Oil Spill Restoration Framework, Volume I.	
Name, Address, Telephone:  Jerome M. Selby, Mayor	
Kodiak Island Borough  Oil spill restoration is a public process. Your ideas	
170 Mill Bay Road and suggestions will not be proprietary, and you kodiak, AK 99615 will not be given any exclusive right or privilege to	

them.

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	COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS	92061 5279
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# ID # 920603094

#### COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

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RANKING	H M L Rank Within Categories	•	
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***************************************	Project Number - if assigned		

#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

YES NO UNKNOWN

/		•
—	—	

1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.

1	

2. Technical feasibility.\*



3. Consistency with applicable Federal and State laws and policies.\*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

-01

#### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: 12
EXXM valdes Oil Spill Marine Sciences Endowment.
Justification: (Link to Injured Resource or Service)
Long term protection of alaska marine convironment required better
Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
Endow a Sund to:
1) Monitor and assess Status of ecosyptems affected
by oil spill
2) Determine how to best effect resource recovery and enhancement
,
3) I lesting needs and opportunities to enhance
4) Coordinate research gragrams active is
alouras maure in 10 mins
Estimated Duration of Project: perfected or scribing fundery which
Estimated Cost per Year: Deposit - Dee Charts
Other Comments: Two grosols -
_0(D) \$100,000,000 in deposits = \$416,403,000
ingrants by 2020
12020 \$75,000,000 in Deposit - \$310,362 in grants by 2020 Name, Address, Telephone:
Strator arlis Sturgulewshi
3// C Steed, State 550 Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you
will not be given any exclusive right or privilege to
$\pm 56[-76]5$ them.

# Alaska State Legislature





3111 C STREET, SUITE \$50. ANCHORAGE, ALASKA 99503 (907) 561-7615

While in Juneau STATE CAPITOL JUNEAU, ALASKA 99801-1182 (907) 465-3818

Document ID Number 920603094

A- 92 WPWG
B-93 WPWG
C-RFWG

E-MISC.

June 3, 1992

Exxon Valdez Oil Spill Trustee Council 645 G Street Anchorage, Alaska 99501

Gentlemen:

Re: Exxon Valdez Oil Spill Restoration - Restoration Framework

During the three years since the grounding of the Exxon Valdez, the trustees and their associates have charted a course through previously unnavigated waters. Much has been accomplished in cleaning the beaches and waters, determining the extent of resource damage, and stemming the tide of injury. The distribution for public comment of the Restoration Framework is another sign that the ultimate destination, the restoration of Alaska's coastal and marine environments, is nearer now, although much remains to be done.

The finished version of the <u>Restoration Framework</u> will map the work of the trustees through the culmination of the charge established the court settlement. As such, it must make manifest the trustees' vision of future programs and objectives, as shaped by experts and the public. As that vision coalesces over the next year, I hope that you will place strong emphasis on looking forward, past individual restoration projects, to a comprehensive view of the outcome of your efforts. That vision should include not only restoration, but also protection of Alaska's shoreline and seas. The physical protection of our injured environment will be difficult to achieve. The constraints on our abilities to foresee and influence the processes of nature, the vagaries of chance, and the limits on technological capabilities are too great. Protection can best become reality through acquiring and using more and better knowledge of Alaska's marine systems and resources. The more we know about those things, the better equipped we are to both restore and protect them.

Trustee Council 6/3/92 Page 2

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D-PAG

I want to make some more specific comments on the process to date and wpwG in the future. These cover both the Restoration Framework process and RPWG those for the 1992 Work Plan and 1993 Work Plan:

- The compressed and overlapping timelines for these three efforts may E-MISC. not result in the best final products. The trustees and staff must simultaneously consider three separate works, each significant in its That must certainly strain resources. The public is likely own right. to suffer some confusion between projects, at the least, and have insufficient time to develop reasoned and comprehensive comments, at worst.
- Comments are due on the 1993 and future work plans before the 1992 Work Plan and the Restoration Plan are finalized. This will surely lead to inefficiencies and duplications avoidable if interested parties had one or both of these documents available prior to submitting comments on future work plans. I understand there is pressure to get these plans in place and proceed accordingly, but the damage has been done, cleanup is essentially complete, and restoration can now generally assume a more considered pace reflective of conservative stewardship and longterm concerns.
- The final Restoration Plan should be final only in the sense that it establishes fundamental guidelines for format, programs, and It should be a living document, adaptable over time as goals are achieved, conditions change, and knowledge expands.
- · Spending \$900 million in public funds is a heavy responsibility under any circumstances. I believe that while a share of the Exxon Valdez settlement may reasonably be spent on habitat acquisition and individual restoration projects, these should not be the exclusive The long-term health of injured focus of restoration efforts. ecosystems and ongoing management of their systems and resources should be accorded an equal priority.

In keeping with these comments and my broad concern that the trustees look to the future in a fashion that makes explicit how each facet of its program contributes to the overall goal, I am submitting a proposal for the Restoration Framework. As you know, some of my colleagues have been involved in this proposal and I am confident of their support as well. The proposal outlines the creation, mission, and administration of an Exxon

Trustee Council 6/3/92
Page 3

Valdez Oil Spill Marine Sciences Endowment. This endowment would consist of portions of annual civil settlement payments set aside in a C-RFWG trust generating annual income. That income would be used to fund long-n-pag term baseline research into ecosystem status, resource recovery and enhancement, and equivalent resource enhancement and acquisition. E-MISC. Additionally, the entity established to administer the endowment would serve as a research coordinating mechanism.

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This proposal is a draft document. It is my intention to submit essentially the same proposal, with some refinements, as a suggestion for the 1993 Work Plan. It is my hope that over the next few months, I will be able to work with the trustee council and restoration teams to further focus this proposal into a shape determined appropriate by the trustees and that fulfills the conditions set by the court.

I look forward to working with the trustee council. We have the opportunity for significant achievements in reclaiming and preserving Alaska's marine and coastal environment. Please contact me or Richard Rainery of my staff if you have any questions concerning my proposal.

Sincerely,

Arliss Sturgulewski Alaska Statė Senator

arlis Sturgulewski

Enclosure

# PROPOSED RESTORATION OPTION FOR RESTORATION FRAMEWORK

Exxon Valdez Oil Spill Marine Sciences Endowment D-PAG

Document ID Number 920603094

Q A-92 WPWG
Q B-93 WPWG
Q C-RPWG

🗓 E-KISC.

Submitted by:

State Senator Arliss Sturgulewski State Capitol, Room 427 Juneau, Alaska 99801-1182 465-3818

June 3, 1992

#### Purpose

The Exxon Valdez Marine Sciences Endowment would be created by diverting a portion of civil settlement funds due the State of Alaska and the United States beginning in December 1992 into a separate fund. The endowment will be dedicated to long-term baseline marine research necessary to:

- monitor and assess the status of ecosystems affected by the oil spill;
- determine how to best effect resource recovery and enhancement where necessary;
- identify needs and opportunities to enhance or acquire equivalent natural resources.

A final mission of the endowment would be to provide a mechanism to coordinate the research programs of the various research organizations active in Alaska's marine environment.

#### Endowment Charter and Operations

<u>Endowment Administration</u>: The trustee council will create a foundation directed by a board distinct from the council. The charter of the foundation will be based on principles established by the trustees.

Restoration Option State Senator Arliss Sturgulewski June 3, 1992

Endowment Life: The endowment will be established as either a duration sinking fund which will spend itself out of existence by a certain or as a trust with a perpetual existence.

Board Composition: University of Alaska, University of Washington, Alaska Department of Fig. 1997 Department of Fish and Game, National Oceanic and Atmospheric Administration (Alaska Region), Alaska Science and Technology Foundation and two public members.

Operations: Operations costs will be held to a minimum (target - 3% or less of funds available annually) by utilizing existing agency resources as much as possible. A small staff will screen proposals and administer grants. The board will make all funding decisions. The EVOS Trustee Council may have to initially administer the foundation until annual income is sufficient to support operations.

Endowment Management: Annual contributions to the endowment trust fund on a schedule based on the amount determined to be appropriate and the fund's structure (sinking fund or perpetual trust). Two alternatives (\$75 million and \$100 million) showing fund growth and income under a perpetual endowment are attached. The trust fund would be managed in a conservative fashion similar to that historically pursued by the Alaska Permanent Fund Corporation, the objects being to protect the principal from inflation and provide a predictable annual income stream.

#### Research Grant Program

Proposal Eligibility: Research on the marine ecosystem as a whole, focussing on biota from the first link in the food chain to the last, oceanographic systems, and their interrelationships. The basic requirements for project eligibility are three:

- A proposal must demonstrate scientific merit and technical feasibility;
- . The outcome of a proposal must directly benefit management of injured marine resources or systems or the equivalent of such injured resources or systems;

Document ID Number 920603094

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Restoration Option State Senator Arliss Sturgulewski June 3, 1992

A reasonable link between the civil settlement requirements to restore, replace, enhance, rehabilitate, or acquire natural resources C-RPWG injured by the spill or their equivalents and the outcome of proposal must be established.

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A-92 WPWG

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Any scientist or institution with a demonstrated record of achievement in marine research or equivalent qualifications may apply for grants, although a formula affording priority for Alaskan scientists and institutions, as indicated by the settlement conditions, will be developed.

Research Coordination: An additional function of the endowment board is as a mechanism to coordinate activities undertaken by the North Pacific marine research community. The intent is to ensure that limited research funding is directed in the most efficient, non-duplicative manner. Institutions and individuals would be required to include as a part of their grant proposals a synopsis of other all current and planned research activities and the board would be required to use this information in its deliberations. The endowment board, composed of the major participants in Alaskan marine research, will be uniquely competent to ensure coordination and cooperation.

- Of extention

Cost \$15,000

#### **EVOS Marine Sciences Endowment**

(Thousands of Dollars)

Document ID Number 920603 0944

DA - 92 WPWG
DB - 93 WPWG
DC - RFWG

O D-PAG

E-MISC.

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	Beginning			Inflation		Ending
Year	Balance	Deposit	Earnings	Proofing	Grants	Balance
1992	0	25,000	2,250	1,000	1,250	26,000
1993	26,000	15,000	3,690	1,640	2,050	42,640
1994	42,640	5,000	4,288	1,906	2,382	49,546
1995	49,546	5,000	4,909	2,182	2,727	56,727
1996	56,727	5,000	5,555	2,469	3,086	64,197
1997	64,197	5,000	6,228	2,768	3,460	71,964
1998	71,964	5,000	6,927	3,079	3,848	80,043
1999	80,043	5,000	7,654	3,402	4,252	88,445
2000	88,445	5,000	8,410	3,738	4,672	97,182
2001	97,182	0	8,746	3,887	4,859	101,070
2002	101,070	0	9,096	4,043	5,053	105,113
2003	105,113	0	9,460	4,205	5,256	109,317
2004	109,317	0	9,839	4,373	5,466	113,690
2005	113,690	0	10,232	4,548	5,684	118,237
2006	118,237	0	10,641	4,729	5,912	122,967
2007	122,967	0	11,067	4,919	6,148	127,885
2008	127,885	0	11,510	5,115	6,394	133,001
2009	133,001	0	11,970	5,320	6,650	138,321
2010	138,321	0	12,449	5,533	6,916	143,854
2011	143,854	0	12,947	5.754	7,193	149,608
2012	149,608	0	13,465	5,984	7,480	155,592
2013	155,592	0	14,003	6,224	7,780	161,816
2014	161,816	0 -	14,563	6,473	8,091	168,289
2015	168,289	. 0	15,146	6,732	8,414	175,020
2016	175,020	0	15,752	7,001	8,751	182,021
2017	182,021	0	16,382	7,281	9,101	189,302
2018	189,302	0 -	17,037	7,572	9,465	196,874
2019	196,874	0	17,719	7,875	9,844	204,749
2020	204,749	0	18,427	8,190	10,237	212,939

Totals

75,000 310,362 137,939 172,423

Earnings = 9%

Inflation = 4%

0 2 extension Cost 25,000

Document ID Numb 920603094

A-92 WPWG

B 93 WPWG

O C RPWG D PAG

E MISC.

## **EVOS Marine Sciences Endowment**

(Thousands of Dollars)

Year	Beginning Balance	Deposit	Earnings	Inflation Proofing	Grants	Ending Balance
1992	0	35,000	3,150	1,400	1,750	36,400
1993	36,400	25,000	5,526	. 2,456	3,070	63,85 <b>6</b>
1994	63,856	5,000	6,197	2,754	3,443	71,610
1995	71,610	5,000	6,895	3,064	3,831	79,675
1996	79,675	5,000	7,621	3,387	4,234	88,062
1997	88,062	5,000	8,376	3,722	4,653	96,784
1998	96,784	5,000	9,161	4,071	5,089	105,855
1999	105,855	5,000	9,977	4,434	5,543	115,290
2000	115,290	5,000	10,826	4,812	6,014	125,101
2001	125,101	5,000	11,709	5,204	6,505	135,305
2002	135,305	0	12,177	5,412	6,765	140,718
2003	140,718	0	12,665	5,629	7,036	146,346
2004	146,346	0	13,171	5,854	7,317	152,200
2005	152,200	0	13,698	6,088	7,610	158,288
2006	158,288	0	14,246	6,332	7,914	164,620
2007	164,620	0	14,816	6,585	8,231	171,204
2008	171,204	0	15,408	6,848	8,560	178,053
2009	178,053	0	16,025	7,122	8,903	185,175
2010	185,175	0	16,666	7,407	9,259	192,582
2011	192,582	0	17,332	7,703	9,629	200,285
2012	200,285	0	18,026	8,011	10,014	208,296
2013	208,296	0	18,747	8,332	10,415	216,628
2014	216,628	0 -	19,497	8,665	10,831	225,293
2015	225,293	. 0	20,276	9,012	11,265	234,305
2016	234,305	0	21,087	9,372	11,715	243,677
2017	243,677	0	21,931	9,747	12,184	253,424
2018	253,424	0	22,808	10,137	12,671	263,561
2019	263,561	0	23,721	10,542	13,178	274,104
2020	274,104	, 0	24,669	10,964	13,705	285,068

Totals

416,403 231,335 100,000 185,068

Earnings = 9%

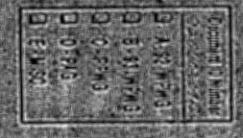
Inflation = 4%

C Smeet, Suite 550 Richard Rainery) 465-3818

JUNUS HEED

EXXON VALDEZ ON SPILL
TRUSTEES COUNCIL
ATTN: REBECCH WILLIAMS

645 & Street, Suite 402. 278-8012



Deealso\_920603.094 Alaska State Legislature - 920618319 3111 C STREET, SUITE 550 ANCHORAGE, ALASKA 99503 (907) 561-7615

#### SENATOR ARLISS STURGULEWSKI

Denate

June 15, 1992

Dazumani 10 Number 920615276

While in Juneau STATE CAPITOL

A- S2 WPWG

B - 93 WPWG C-RPWG

D - PAG

E-HISC.

Exxon Valdez Trustee Council 645 G Street Anchorage, Alaska 99501

Gentlemen:

Re: Exxon Valdez Oil Spill Restoration - 1993 Work Plan

During the three years since the grounding of the Exxon Valdez, the trustee council has done much to stem the tide of injury, clean the beaches and seas, and gauge damages. Your request for public proposals for restoration projects for 1993 and beyond signals that our destination, the restoration of Alaska's coastal and marine environments, is nearer, although much remains to be done.

Future work plans, composed of specific programs and objectives, will guide restoration efforts. I hope that the plans will emphasize a comprehensive, long-term solution, with each project integral to that goal. Protection of Alaska's shoreline and seas is a vital element of restoration. Physical protection will be difficult because of constraints on our abilities to foresee and influence natural events, the vagaries of chance, and the limits of technology. Protection is possible, however, by improving knowledge of Alaska's marine systems and resources. The more we know about those ecosystems, the better equipped we are to both restore and protect them.

I am submitting a proposal for the 1993 Work Plan, and for future work plans as well. As you know, some of my colleagues have been involved in this proposal and I am confident of their continued support. The proposal outlines the creation, mission, and administration of the Exxon Valdez Marine Sciences Endowment. Portions of annual settlement payments would be set aside in a trust generating annual income to fund long-term baseline research into ecosystem status. resource recovery and enhancement, and equivalent resource enhancement and acquisition. Additionally, the endowment would serve as a research coordinating mechanism.

This proposal is expanded from that submitted on June 3 for the <u>Restoration Framework</u>, It is my hope, over the next few months, to work with you to focus my proposal into a shape you determine appropriate and that fulfills the settlement conditions. We have the opportunity for significant achievements in reclaiming and preserving Alaska's marine and coastal environment. Please contact me or Richard Rainery of my staff with any questions concerning this proposal.

Orles Shugalandi Arliss Sturgulewski

Alaska State Senator

Enclosure cc: Distribution List

## PROPOSED RESTORATION OPTION FOR 1993 AND SUBSEQUENT WORK PLANS

## Exxon Valdez Marine Sciences Endowment

	current ID Number 20615272
۵	A- 92 WPWG
3	B-93 WPWG
a	C - RPWG
0	D - PAG
0	E-MISC.

State Senator Arliss Sturgulewski State Capitol, Room 427 Juneau, Alaska 99801-1182 465-3818

June 15, 1992

### I. Purpose

The Exxon Valdez Marine Sciences Endowment would be created by diverting a portion of civil settlement funds due the State of Alaska and the United States into a separate fund. The endowment will have two primary objectives. Its basic purpose is as a source of funding dedicated to long-term baseline marine research necessary to:

- monitor and assess the status of ecosystems and resources affected by the oil spill;
- determine how to best effect resource recovery and enhancement where necessary;
- identify needs and opportunities to enhance or acquire equivalent natural resources.

The spill has magnified both the opportunity and responsibility for prudent stewardship of Alaska's resources, lands, and waters. The preeminent mission of the endowment is to advance our body of knowledge applicable to resource and habitat management and to speed and enhance restoration. An inevitable and happy corollary of this new knowledge will be an enhanced capacity to respond to Alaska's next maritime calamity.

Secondly, the endowment would act as a coordinating mechanism for the various research organizations active in Alaska's marine environment, filling a void conducive to inefficient use of limited research resources.

State Senator Arliss Sturgulewski June 15, 1992

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A-S2 WPWG

C - RPWG

D - PAG

## II. Endowment Charter and Operations

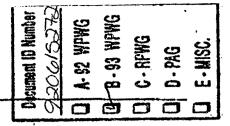
Foundation Structure: The trustee council will create a foundation directed by a MISC. board distinct from the council. The charter of the foundation will be based on broad principles established by the trustees and articulated in detail by the foundation board. The trustees will approve the final version of the charter. The Alaska Science and Technology Foundation provides a model that the trustees may find instructive.

Board Composition: University of Alaska, University of Washington, Alaska Department of Fish and Game, National Oceanic and Atmospheric Administration (Alaska Region), Alaska Science and Technology Foundation, and two public members. The first four named entities are the principal participants in marine research in the North Pacific. The Alaska Science and Technology Foundation provides expertise in grant evaluation and administration. The two unnamed slots would be unrestricted, allowing for the inclusion, for example, of one or more of the marine research institutes proposed in the wake of the spill. Actual board members must be from relevant subdivisions of these organizations, for example, the University of Alaska's School of Fisheries and Ocean Sciences.

Endowment Life: The endowment will be established, beginning in December, 1992, as a trust with a perpetual or unspecified existence or as a limited duration sinking fund which will spend itself out of existence by a time certain. An unlimited period of existence is preferable, at least until the duration of tangible effects of the spill has been defined. The time should be sufficient to allow full assessment of long-term damages and recovery and study of alternatives. This will inevitably stretch beyond the point at which damage is no longer measurable.

Endowment Management: Annual contributions to the endowment trust fund on a schedule based on the amount determined to be appropriate and the fund's structure (perpetual trust or sinking fund). The trust option is preferable. The principal is to be inviolate, with only annual earnings spent on administration, grants, and inflation proofing. \$75 million to \$100 million should eventually be deposited into the endowment in order to generate annual income sufficient to support a meaningful grant program (see attached tables). The endowment should be "front-loaded" so that income sufficient to administer the foundation will be generated more quickly, freeing the trustees from responsibility for administrative costs, and the amount available for grants will grow more rapidly.

State Senator Arliss Sturgulewski June 15, 1992



Trust fund management should be conservative, on the model of the Alaska Permanent Fund Corporation, the objects being to protect the principal from the effects of inflation and provide a predictable annual income stream.

Foundation Operations: Operations costs will be held to a minimum (target - approximately 4% to 5% of funds available annually) by utilizing existing agency resources as much as possible. The board will make all funding decisions. A small staff will screen proposals and administer grants. The trustees may want to administer the foundation until annual income is sufficient to support operations, the board is fully constituted, and the administrative apparatus is in place. Alternatively, a higher percentage of annual earnings could be devoted to operating costs until the endowment is generating adequate income. At that point, the expense ratio could be decreased to the target ratio.

#### III. Research Grant Program

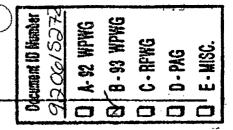
<u>Proposal Eligibility</u>: Research on the marine ecosystem as a whole, focussing on biota from the first link in the food chain to the last, oceanographic systems, and their interrelationships. While the trustees may choose to provide more specific direction in the foundation charter, there are three basic eligibility criteria:

- A proposal must demonstrate scientific merit and technical feasibility;
- The outcome of a proposal must advance management of injured marine resources or systems or the equivalent of such injured resources or systems;
- A reasonable link between the civil settlement requirements to restore, replace, enhance, rehabilitate, or acquire natural resources injured by the spill or their equivalents and the outcome of a proposal must be established.

Research work should not arbitrarily be limited to the known boundaries of the oil spill for several reasons. When the spill occurred, we had only a very incomplete understanding of the status and interrelationships of the resources and habitats of Prince William Sound and the Gulf of Alaska. In restoring spill-injured species and systems to pre-spill conditions, there may be no alternative to conducting research in similar uninjured areas to develop a picture of pre-spill baseline conditions.

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State Senator Arliss Sturgulewski June 15, 1992



The settlement charge to enhance or acquire the equivalent of injured natural resources or reduced or lost services will naturally lead beyond spill boundaries. The resources and systems of Prince William Sound, the Gulf of Alaska, and the Bering Sea are not neatly divisible, but often strongly interdependent. Winter atmospheric conditions in the gulf and the southeastern Bering Sea are historically very similar and directly linked to salmon harvests, according to a recent hypothesis.

The oceanographic systems of the three bodies of water are interdependent as well. The Alaska Current flows along the gulf coast, through Prince William Sound, and then straddles Kodiak Island. Eventually, some of this same water that carried spilled oil out of Prince William Sound streams through Unimak Pass into the Bering Sea. The Subarctic Current system draws on Eastern Bering Sea waters. This current flows along the Aleutians and skirts the Gulf of Alaska until it nears the coast of British Columbia, where it divides in two. The northern arm becomes one of the primary sources of the Alaska Current.

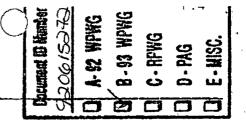
The biota of the three seas are not discrete either. Four of the five salmon species spawning in Alaskan streams frequent both the Bering Sea and parts of the Gulf of Alaska fouled by the renegade cargo of the Exxon Valdez. Bristol Bay sockeye, for one, migrate along the south shore of the Alaska Peninsula, within the recorded range of the spill. Sockeye from Prince William Sound swim essentially the entire range of the Gulf of Alaska during their ocean odyssey. Pink salmon from southeast Alaska do likewise, as do Western Alaska chums, in all probability. Central and southeastern bred chinook are common in the Bering Sea and western Alaska chinook are found in the western gulf.

Certain Gulf of Alaska pollock stocks and sablefish from as far away as southeast may find their way through Aleutian passes into the Bering Sea, speculation has it. Future tagging studies may confirm that these are indeed significant interchanges.

It is overly restrictive to take a map delineating the bounds of known spread of Exxon Valdez oil and say that we will look no further than these shores and these waters and at no more than the animals that inhabit them full-time.

Individual/Institutional Eligibility: Any scientist or institution with appropriate credentials in marine research may apply for grants. The bulk of grants will be directed to scientists and institutions in Alaska, in keeping with the notion that Alaska be the prime beneficiary of the settlement. The board will develop

State Senator Artiss Sturgulewski June 15, 1992

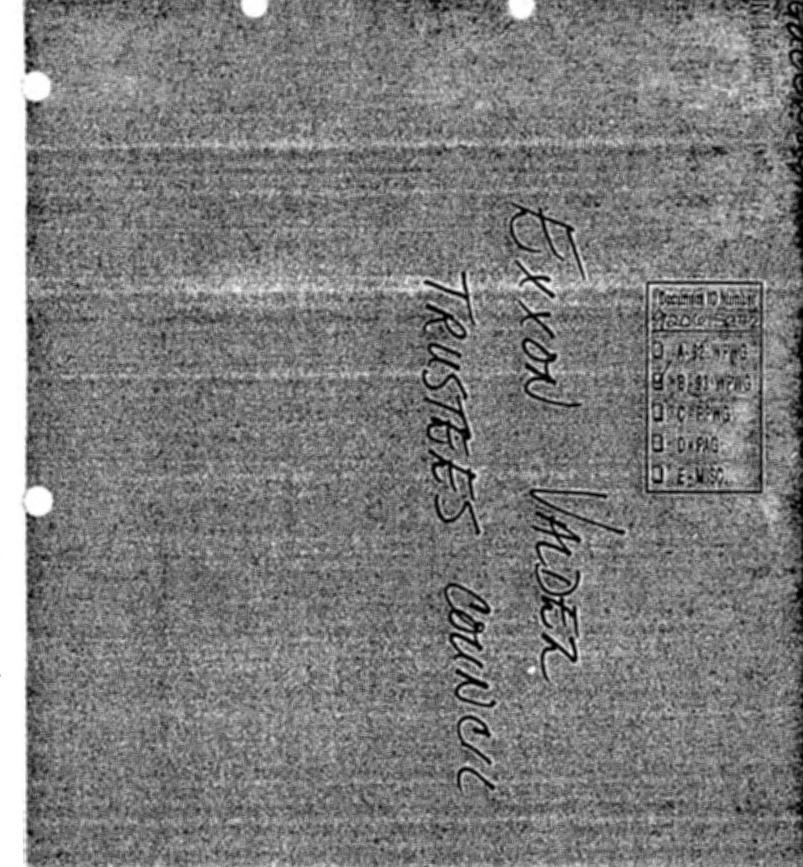


criteria to ensure this, as well as the objective consideration of all proposals. A funding allocation formula may be required.

Research Coordination: The other prime function of the endowment board is to coordinate projects and programs undertaken by the North Pacific marine research community, ensuring the most efficient use of limited research funds. The board, composed of the major participants in Alaskan marine research, will be uniquely competent to ensure coordination and cooperation. Institutions and individuals must include with their grant proposals a synopsis of all other current and planned research activities. The endowment board will use this information in its deliberations. A marine research needs assessment and comprehensive research plan will result. This plan should also include projects that cannot qualify for funding under endowment guidelines.

#### IV. Summary

This proposal focuses on aspects of restoration that are of as great a value as many believe the preservation of habitat by acquisition to be. Ongoing injury assessment and collection of baseline data are imperative in order to make informed management decisions into the future. Wise resource and habitat replacement, enhancement and acquisition will require more information than we now have. In all likelihood, the most productive means of restoration at our command will prove to be management of human uses of resources and habitats. Manipulation of affected resources may prove necessary in some instances. In either case, the existence of the Exxon Valdez Marine Sciences Endowment will ensure that informed choices can be made. Future benefits will also include a broader understanding of how to cope with the next marine disaster off Alaska's shores. The value and utility of knowledge will not end when settlement payments cease. The outcome of many of the projects and programs undertaken in the name of restoration will not be known for years afterward. The long-term must be our horizon and this proposal provides the means to take that approach.



)		COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS	-02
		Checked for Completeness	Endowment
		ID stamped/Input completed Name Affiliation JO Costs  Technical Services	comment Re
		ofter-science (endowment)	dant o
		Lead Agency	
	***************************************	Cooperating Agency(ies)	
)	(у) и	Passed initial screening criteria	
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	RANKING	H M L Rank Within Categories	
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•		Project Number - if assigned	· · · · · · · · · · · · · · · · · · ·

#### 1993 PROJECT SCORING SHEET

### Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".						
YES	NO	UNK	NOV	VN		
<u>~</u> _	_	Person	1.	Linkage to resources and/or services injured by the Exxon Valdez oil spill.		
<u>~</u>		<u> </u>	2.	Technical feasibility.*		
<u> </u>		:	3.	Consistency with applicable Federal and State laws and policies.*		

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

Mational Oceanic a Atmospheric National Marine Fisher & Service Alaska Fisheries Science Center Investigations-Research
P. O. Box 1638
Kodiak, AK 99615

January 29, 1992

Cocced as Selby

Cocced as Selby

Jenus 10 Number 920601058
1 A-92 WPWG

B-93 WPWG

D-PAG

The Honorable Jerome Selby Mayor, Kodiak Island Borough 710 Mill Bay Road Kodiak, AK 99615 Post-It brand fax transmittal memo 7671 # of places 1/2

To Dave Givens From Icrone Selb-1

Co. Oil Trustee Cours! Co. KIB

Dept. Phone # 486-9.300

Fax # 1-276-7178 Fax # 486-9374

Dear Mayor Selby;

During the 21 January meeting of the KIB Shoreline Committee, you requested that I send you a written sketch of my ideas. Since these comments are simply my observations and suggestions they do not reflect NMFS policy and have not been reviewed by those more directly involved with the Exxon Valdez spill.

With regard to programs, I noted that the spill had caught everyone flat-footed with regard to baseline data. In particular there were no standard collection sites in the Kodiak archipelago where data un oil content of sediments, faunal or floral species composition or other baseline data were routinely collected. As a result various agencies (NMFS, ADF&G, Alaska DEC, etc.) were scrambling to collect data as the oil was drifting toward these islands. I suggested that a committee approach be adopted to select key or critical sites that would provide a long term series of baseline observations. I also suggested that, since there was a large area within the Borough that could potentially be impacted by oil spills, that a revolving fund be set up as a means of paying for baseline sampling and analysis. This could be in the form of an endowment. Reasonable such a fund could apply to areas outside the Borough or to the State as a whole, but I believe that some local control is desirable.

The University of Alaska's suggestion that a running seawater facility be set up to assess toxicity is a good one and would serve the Borough well in various capacities.

With respect to criteria for evaluating various proposals I suggested only one. I believe that the major criterion should be that any given program funded from the settlements should show strong potential to improve our ability to deal with oil related catastrophes in the future.



Upon further reflection, it also occurs to me that there is a large back-log of unanalysed samples and data that were collected during the assessment process. Due to the large number of samples collected and the necessity of producing an assessment in a timely fashion, a great deal of "triage" was involved in selecting samples of data to be analyzed. Perhaps a revolving fund-endorsement approach could be used here also.

04

Sincerely,

Dr. Robert S. Otto, Facility Director **Document 10 Humber** 920601058

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

cc: Gary Stauffer F/AKC1
RACE Reading file

Comment

ID # 920601058-04

## COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

	Chec	ked f	or Com	pleteness			Endow	ment
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#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

#### YES NO UNKNOWN

<u></u>	 1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
<u> </u>	 2. Technical feasibility.*
<u>~</u> _	 3. Consistency with applicable Federal and State laws and policies.*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.

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UNITED STATE EPARTMENT OF COMMERC

National Oceanic and Atmospheric NATIONAL MARINE FISHERIES SERVICE

Alaska Fisheries Science Center Investigations-Research

P. O. Box 1638 Kodiak, AK 99615

January 29, 1992

as Selby

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The Honorable Jerome Selby Mayor, Kodiak Island Borough 710 Mill Bay Road Kodiak, AK 99615 Post-It™ brand fax transmittal memo 7671 # of plans

To Dave Givens From Icrone Selb-1

Co. O'l Trusice Council Phone # 486-9.300

Fax# 1-276-7178 Fax# 486-9374

Dear Mayor Selby;

During the 21 January meeting of the KIB Shoreline Committee, you requested that I send you a written sketch of my ideas. Since these comments are simply my observations and suggestions they do not reflect NMFS policy and have not been reviewed by those more directly involved with the Exxon Valdez spill.

With regard to programs, I noted that the spill had caught everyone flat-footed with regard to baseline data. In particular there were no standard collection sites in the Kodiak archipelago where data on oil content of sediments, faunal or floral species composition or other baseline data were routinely collected. As a result various agencies (NMFS, ADF&G, Alaska DEC, etc.) were scrambling to collect data as the oil was drifting toward these islands. I suggested that a committee approach be adopted to select key or critical sites that would provide a long term series of baseline observations. I also suggested that, since there was a large area within the Borough that could potentially be impacted by oil spills, that a revolving fund be set up as a means of paying for baseline sampling and analysis. This could be in the form of an endowment. Reasonable such a fund could apply to areas outside the Borough or to the State as a whole, but I believe that some local control is desirable.

The University of Alaska's suggestion that a running seawater facility be set up to assess toxicity is a good one and would serve the Borough well in various capacities.

With respect to criteria for evaluating various proposals I suggested only one. I believe that the major criterion should be that any given program funded from the settlements should show strong potential to improve our ability to deal with oil related catastrophes in the future.

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Upon further reflection, it also occurs to me that there is a large back-log of unanalysed samples and data that were collected during the assessment process. Due to the large number of samples collected and the necessity of producing an assessment in a timely fashion, a great deal of "triage" was involved in selecting samples of data to be analyzed. Perhaps a revolving fund-endorsement approach could be used here also.

Sincerely,

Dr. Robert S. Otto, Facility Director

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cc: Gary Stauffer F/AKC1
RACE Reading file

## ID # 920601067

	COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS	.* .•
	Checked for Completeness .	Endowmen
	ID stamped/Input completed Name Affiliation Costs	Froposal
	Category Tech Sypport of Other Conservation Fund Technical	Sout
	Lead Agency	
<del></del>	Cooperating Agency(ies)	<del></del>
о №	Passed initial screening criteria	
Type:	ENDOWMANY	
RANKING	H M L Rank Within Categories	•
	H M L Rank Overall	
	Project Number - if assigned	

#### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

#### FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Alaska cand and will	dlife Conscionation Fund
Justification: (Link to Injured Resource or Service	
Establish a Conscruation Fund to pr	
Description of Project: (e.g. goal(s), objectives,	
D provide a permonent En Nonganz unlable Conserve	Jon Program
Dequire high welve wildle protection and management	***************************************
3) undertake or support ather the conscruction of Piske	er activities that further by, wildlife and plant resources
Solicit Funds From other sau	rcei
Fund to be run by directors	
Estimated Duration of Project: ongoing	
Estimated Cost per Year: op to 1 mille	on from Exxon settlement funds
Other Comments: substantial back up	
Name, Address, Telephone:	
308 G St., Suite 219	Dil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you
	will not be given any exclusive right or privilege to hem.

#### 1993 PROJECT SCORING SHEET

#### Critical Factors

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

#### YES NO UNKNOWN

\_\_ \_

1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.

<u>/\_</u> \_

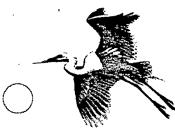
2. Technical feasibility.\*

\_\_ \_

3. Consistency with applicable Federal and State laws and policies.\*

Comments:

<sup>\*</sup> Restoration Framework, 1992, pp 43-44.



## National Audubon Society

ALASKA • HAWAII REGIONAL OFFICE 308 G STREET, SUITE 219 • ANCHORAGE, ALASKA 99501 • (907) 276-7034 • FAX (907) 276-5069

March 3, 1992

Dave Gibbon
Interim Executive Director
EVOS Restoration Team
Simpson Building
645 G Street
Anchorage, AK 99501

Dear Mr. Gibbon:

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This is to provide you with a copy of the National Audubon Society's June 4, 1990 proposal to establish an <u>Alaska Land and Wildlife</u>

<u>Conservation Fund</u> with monies from the Exxon Valdez oil spill settlement. We urge you to give this proposal serious consideration.

I have also enclosed a copy of <u>An Analysis of Program Options and Priorities for the Kodiak Brown Bear Research and Habitat Maintenance Trust</u> to show you the potential of such funds or trusts to really do something meaningful to mitigate serious environmental damage resulting from the oil spill.

Thank you for your consideration.

Sincerely,

Dave Cline.

Regional Vice President

cc: Nancy Lethcoe

A PROPOSAL TO ESTABLISH AN
ALASKA LAND AND WILDLIFE CONSERVATION FUND

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NATIONAL AUDUBON SOCIETY

ALASKA-HAWAII REGIONAL OFFICE

ANCHORAGE, ALASKA

JUNE 4, 1990

#### INTRODUCTION

The tragic Exxon Valdez oil spill of March 24, 1989 has resulted in severe mortality to wildlife, plethora of litigation, a cross current of accusations as to who was really to blame for the spill, and the expenditure of astronomical sums of money on public relations campaigns and questionable clean up activities.

Rather than forcing Exxon to spend additional millions in ineffective beach restoration activities, prolonged litigation, escalating legal fees and costly public relations gestures, it would be in everyone's best interest to find a win/win solution to this unprecedented dilemma. An optimal solution would be to settle all litigation expeditiously with most of the monies collected from the criminal charges against Exxon remaining here in Alaska for the state's long term economic and environmental good.

As a significant step toward this end, we propose that at least \$1 billion in settlement monies be committed to the establishment of an Alaska Land and Wildlife Conservation Fund (hereinafter referred top as the Fund).

Environmental trust funds are proving increasingly popular in other states to protect nature as a result of industrial pollution. The two basic purposes of the fund in Alaska should be to acquire high value lands to protect their wildlife, wilderness, and recreational values in perpetuity, and develop the best nongame wildlife conservation program in America.

#### PURPOSES AND ADMINISTRATION

Primary purposes of the Fund would be to:

- 1. Acquire high value wildlife habitats for permanent protection and management;
- 2. Provide a permanent funding base for the Alaska Nongame Widlife Conservation Program; and
- 3.Undertake or support other activities that further the conservation of fish, wildlife and plant resources of Alaska.

Initial sources of funding would be \$1 billion from Exxon in partial restitution for causing the worst oil spill in our nation's history. Once established, the Fund could be increased from philanthropic sources, government agencies, and its own fundraising initiatives.

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Monies dispersed from the Fund would supplement established sources of funding for land acquisition and wildlife conservation, not substitute for them. This would allow this program to expand consistent with future public needs and desires.

The Fund would provide authoritative, objective, and nonpartisan support for wildlife conservation in Alaska. It would serve as a catalyst for developing creative partnerships between private wildlife organizations and public wildlife agencies. By matching private with public monies to create a secure funding base, Alaska could broaden its present activities and develop a wildlife conservation program that could stand as an international model.

The Fund's administrative structure should be kept lean to ensure that the maximum financial support goes where it is needed most: the project level. A nine-member volunteer board of directors would hire an executive director, set policy, and help raise funds. All principal state fish wildlife constituency interests should be represented on the board including recreational hunting and fishing, subsistence, wildlife viewing, environmental and tourism).

Individual directors would serve four year staggered terms. It would be essential that all board members be knowledgeable in the principles of wildlife conservation, and committed to the protection and management of Alaska's wildlife for all their beneficial uses to society. A small executive staff would actually manage the Fund, negotiate land acquisitions and raise funds.

#### JUSTIFICATION AND NEED

It is widely recognized that Alaska supports some of the last great wildlife and wildland spectacles remaining on the planet. However, few people realize that 88% of our 534 species of wildlife are nongame. That is, they are not harvested, but instead enjoyed by growing numbers of people for their aesthetic, scientific and educational values. Perhaps equally important is the fact that all of Alaska's 63 game species also possess similar nonconsumptive values.

#### Alaska Nongame Wildlife Conservation Program

The Alaska Department of Fish and Game (ADF&G) through its Division of Wildlife Conservation (DWC), has a broad mission under state statute to conserve all species of wildlife consistent with principles of sustained yield and "... subject to preferences among beneficial uses." Yet the state's wildlife programs place heavy emphasis on species that are hunted or trapped.

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ADF&G is a traditional state fish and game agency, funded largely from the sale of hunting licenses and federal excise taxes on sporting arms and ammunition. In 1989, DWC derived \$8.6 million from these sources. The DWC has a staff of 148 professionals. The division's nongame program, however, has remained small in scope and budget since its inception in 1981. The program currently has only 4 positions and a \$35,000 operating budget, excluding salaries. Total funding for nongame programs represents only about 2 percent of DWC's budget of \$10.5 million.

Alaska ranks in the lower 25 percent of states in staffing and funding for its nongame wildlife program in spite of the fact that there is tremendous public interest in wildlife viewing and a growing tourism potential directly linked to wildlife and wildlands recreation.

One of the high priority goals of the Fund would be to provide a permanent funding source for the state's nongame program. A model nongame wildlife program would require an initial budget of about \$1 million annually (Appendix I). Expenditure would then be made to help develop world class wildlife viewing opportunities. National wildlife recreation surveys show that a large and growing proportion of the U.S. population actively participates in wildlife viewing activities.

States like Minnesota and Wyoming are actively promoting wildlife viewing to increase revenues from tourism. But clearly, Alaska is unsurpassed in its potential for attracting thousands of wildlife viewers from around the world. The resulting boost to Alaska tourism could be substantial, as already shown at the popular McNeil River and Round Island state wildlife sanctuaries. Careful planning and management will be necessary, however, to protect wildlife and habitat resources while ensuring visitor safety and enjoyment.

Among Alaska's outstanding wildlife viewing opportunities are those in the vicinity of Alaska's major population centers. Construction of nature centers would add to the visitor experience at Potter Marsh and Palmer Hay Flats near Anchorage, Mendenhall Flats at Juneau, Creamer's Field in Fairbanks, the Alaska Chilkat Bald Eagle Preserve near Haines, and the Kenai River Flats at Kenai.

Meanwhile, the potential for expanded nongame viewing opportunities in more remote areas of Alaska are unmatched in the world. Spectacular bear concentration sites, marine mammal haulout grounds, seabird rookeries, bald eagle roosts, Dall sheep cliffs, salmon spawning grounds, caribou aggregation areas, and migratory bird staging areas hold outstanding potential for increased public viewing opportunities. They are of unsurpassed quality.

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In addition, there is a growing need to develop wildlife interpretive displays like Minnesota's extremely popular International Wolf Exhibit. These displays could be placed at expanded public visitor centers, airports, ferry terminals, railroad and bus depots, and at major conference centers.

Wildlife interpretive literature and programs would enhance the visitor's experience on tour ships and buses, state ferries, the Alaska Railroad, and airplanes. In Hawaii, for example, United Airlines is planning to show video programs on "Alien Wildlife of the Hawaiian Islands" to all its Hawaii bound passengers.

#### Land Acquisition

For Alaska's wildlife to continue to thrive, protection of their habitats is essential. Key lands and waters for feeding, breeding, rearing young, migrating staging, and resting along readily available and clean water supplies are especially important. To ensure the continued availability and ecological functioning on these areas, permanent protection is necessary. The ADF&G and other public agencies are severely limited by funding in their efforts to protect vital public fish and wildlife habitats across the state. The Fund would have as a major part of its program the acquisition — on a willing seller basis — of key areas of productive wildlife habitat for permanent protection under public ownership.

Once acquired, lands would be assigned to the most appropriate state and federal agency for protection and management. Initially, land acquisition efforts would focus primarily on the coastal areas of southcentral Alaska. Concern over the recent Prince William Sound oil spill has vividly brought to the world's attention the extraordinary qualities of Alaska's southcentral coast. While the oil spill was an ecological disaster, some of the most serious threats to the character and public values of the region's natural resources are posed by changing land use. Spending oil spill fines and penalties for and acquisition in the spill area would be the most effective and lasting form of compensation and restitution possible.

Coastal lands of southcentral Alaska are immensely valuable for fish and wildlife habitat, public recreation and ecological productivity. Their worth is partially reflected in the high economic value of their current non-consumptive public uses for tourism and outdoor recreation, as well as commercial and sport fishing, sport hunting, and subsistence harvesting of fish and wildlife.

The waters and lands of the region support vast populations of birds, mammals and fish. Millions of shore

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birds and waterfowl migrate through the area and tens of thousands remain year round. Hundreds of pairs of bald eagles nest on the wild shores. Humpback and several other species of whales feed here in the warmer months. Sea otters, sea lions and harbor seals live along the coasts all year. Grizzly bears, black bears, Sitka blacktailed deer, mountain goats, river otters and many other land mammals inhabit upland habitats. The coast's coastal waters are inhabited be salmon, cod, herring, halibut, shrimp and crab which support a multimillion dollar fishing industry.

Tourism has been expanding rapidly in the region, based on viewing of wildlife and scenery, recreational boating, and sport fishing and hunting. In Prince William Sound the state ferry has been running almost at capacity since 1981 on the popular summer tourist route between Whittier and Valdez. Tour boats take tens of thousands of visitors on day trips to see glaciers, wildlife and scenery. Boat and airplane charters transport recreationists throughout the region. Cruise liners began visiting the Sound about 1981; they now make dozens of trips there each summer. Major cruise lines are adding ships to accommodate the expanding market.

Almost 40,000 person days are spent sport fishing annually. Apart from recreational visits, approximately 2,500 people, mostly from three small local communities, qualify for subsistence use of resources in Prince William Sound.

Most of the coast has seen negligible development to date and much of the land is still in public ownership. Most of the rest has only recently passed into private -- mostly Native corporation -- hands.

Change is coming rapidly, however. With recent finalization of land ownership and the conclusion of protracted battles over land use plans, development is now starting to take place. Native corporations are beginning to cut their timber and the U.S. Forest Service is completing logging plans for some lands in the Chugach National Forest. Subdivision of shore lands for sale or leases as recreational second home sites has begun and more is planned. Commercial facilities are being considered several places.

Land owners, particularly Native corporations, often would prefer to keep their lands in a natural state. These private lands are often heavily used for traditional purposes including subsistence hunting, fishing and gathering. Yet the corporations often have few other economically productive resources and are under intense financial pressure to earn revenue from their lands. Many of these lands, including their timber and other resources, are now for sale.

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For example, four Native corporations own 451,000 acres of the mainland and islands of Prince William Sound, much of it prime wildlife habitat. Extensive logging and limited recreational subdivisions have begun. More are being planned. At the southwest end of the Kenai Peninsula, conservationists are desperately trying to negotiate a land exchange with the state to restore Native corporation inholdings within Kachemak Bay State Park to public On Afognak Island, two Native corporations are soliciting support to put 211,000 acres of their land into a In the meantime, logging has federal wildlife refuge. On Kodiak Island, Native corporations have proposed that their 262,000 acres of inholdings in the Kodiak National Wildlife Refuge be added to the refuge by land exchanges. Off the south end of Kodiak, 51,000 acres on Sitkalidak Islands are available from a Native corporation for inclusion in the Alaska Maritime National Wildlife Refuge.

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Development plans are not well advanced on most land along the southcentral coast. There is still time to find alternatives that give private land owners some return while protecting valuable wildlife habitat and recreation opportunities on their properties for themselves and the broader public.

Similar situations threaten public natural resources in many other parts of Alaska besides the southcentral coast. Incompatible development or restrictive management of private lands, particularly within or adjacent to wildlife refuges or parks, endanger their ecological integrity and their value for wildlife habitat and existing public uses. In many cases, these land owners (again, usually Native corporations or individual Natives) also might prefer alternatives to developing their lands, but financial options are few.

The scope of potential land acquisition actions in Alaska is so vast, however, that prioritization would be essential. By any reckoning, Prince William Sound and other parts of Alaska's southcentral coast are extremely important and vulnerable. The Fund could expand its land acquisition activities as opportunities arose elsewhere in the state.

#### CONCLUSION

As the world continues to lose its biodiversity because of burgeoning human populations and resultant habitat destruction, Alaska stands unique as possessing world class wildlife and wildland values. That is why growing numbers of people from throughout the country and the world have a strong interest in visiting Alaska. They want to come here to see our spectacular natural beauty and wildlife. In doing so they are able to experience an adventure of a lifetime recapturing a bit of what has been lost near their homes.

We now have the opportunity to turn a tragic event, the Exxon Valdez oil spill, into something of lasting environmental and economic good for Alaska and the nation. By using settlement monies to establish an Alaska Land and Wildlife Conservation Fund, we can conserve a natural heritage for our children that is unmatched in the world, while at the same time better preparing Alaska economically for the day when the oil runs out.

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STAFFING	O E-MISC.
Permanent Full Time Staff	
1 Senior Staff Biologist	*
1 Wildlife Education Coordinator	*
1 Statewide Ornithologist	60,500
1 Statewide Mammalogist	60,500
l Statewide Ecosystem Ecologist	60,500
1 Statewide Info. Spec./Volunteer Coord.	47,500
2(1/2)Regional Info Specialists	47,500
l Economist	30,500
3 Regional Coordinators	47,800
l Regional Staff Biologist	53,500
3 Refuge /Sanctuary Interpretive Staff	141,000
3 Clerk/Typists	61,000
J GICIN, IJPIDED	
SUBTOTAL	\$609,800
Permanent Seasonal Staff	
4 Refuge/Sanctuary Staff	*
3 Regional Interpretive Naturalists	30,000
2 Research Assistants	26,700
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SUBTOTAL	56,700
TOTAL STAFF COSTS	\$666,500
OPERATING BUDGET	
Education	50,000
Public Information	50,000
Management	75,000
Research	75,000
Grants to universities (graduate students) and organi	
for research and interpretive projects	100,000
TOTAL OPERATING COSTS	\$ 350,000
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GRAND TOTAL

f \* Existing positions within the Wildlife Conservation Division of ADF&G

# ANALYSIS OF PROGRAM OPTIONS AND PRIORITIES

Prepared for

THE KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST

**Document ID Number** 920601067

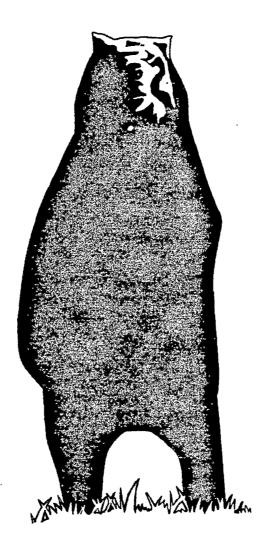
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Prepared by: The LTN GROUP Anchorage, Alaska January 1992





ALASKA • HAWAII REGIONAL OFFICE

308 G STREET, SUITE 219 • ANCHORAGE, ALASKA 99501 • (907) 276-7034 • FAX (907) 276-5069

February 25, 1992

Dear Friend of Kodiak Brown Bears:

I'm pleased to provide you with a copy of <u>Analysis of Program Options and Priorities</u> for the Kodiak Brown Bear Research and Habitat Maintenance Trust. As you will recall, the Trust was established in 1981 as a mitigation device for the Terror Lake Hydroelectric Project on the Kodiak National Wildlife Refuge in Alaska. It has since helped support ongoing cooperative bear research on the refuge.

Because the best available scientific information showed brown bears and their habitats on the Kodiak National Wildlife Refuge could be in serious jeopardy, the trustees commissioned this report from The LTN Group. The consultant's findings have confirmed our concerns and reveal that the very integrity of the Kodiak National Wildlife Refuge is at stake.

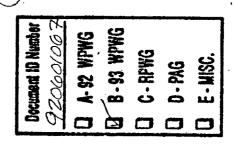
Thus the trustees, by unanimous endorsement, have selected Option #5, "accelerated program development and expansion" for future management of the Trust. In addition, we have agreed to implement all the consultant's recommended program options to include ongoing support for research, public education, and acquisition of critical bear habitats. This will require prompt development of a comprehensive strategy with primary emphasis on nationwide fundraising to support protection of threatened bear habitats in the Kodiak Island Archipelago.

To assure maximum results from these efforts, the trustees are committed to full cooperation with all those that share our concern for the future of the largest land carnivore on earth, the Kodiak brown bear.

Thank you for your interest and we welcome your advice and involvement.

Sincerely,

Dave Cline Chairman



KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST

ANALYSIS OF PROGRAM OPTIONS AND PRIORITIES

Executive Summary

Prepared for:

The Kodiak Brown Bear Research and Habitat Maintenance Trust

Prepared by: The LTN Group

Anchorage, Alaska

January 1992

KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST

ANALYSIS OF PROGRAM OPTIONS AND PRIORITIES

Executive Summary

**Document ID Number** 920601067

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#### <u>Overview</u>

The Kodiak Brown Bear Research and Habitat Maintenance Trust (Trust) was established in 1981 to ensure that construction and operation of the Terror Lake Hydroelectric Project would not jeopardize the continued existence of Kodiak brown bears (Ursus arctos middendorffi) and to mitigate impacts of the project on bear habitats in and adjacent to the Kodiak National Wildlife Refuge (Refuge). The creation of the Trust was an unprecedented conservation action in Alaska because it provides a mechanism whereby potential impacts from the project and other sources on Kodiak bears can be minimized by off-site mitigation measures. The Trust, and other mitigation features for the Terror Lake project, resulted from a joint Settlement Agreement between the Kodiak Electric Association (the original project sponsor), the State of Alaska, the Department of Interior, the Sierra Club, the National Audubon Society, and the National Wildlife Federation which resolved the major environmental conflicts associated with The project was constructed from 1982 the proposed project. through 1984 and became fully operational in 1985.

In recognition of the high potential for serious long-term threats to Kodiak brown bears and their habitats, the Trust's Board of Trustees (Trustees) contracted a study in July 1991 to conduct "An Analysis of Program Options and Priorities" for the Trust. The study included an evaluation of administrative options for the Trust (e.g., incorporating, expanding Trust programs) and an analysis and prioritization of program options (e.g., planning and research needs, habitat protection strategies) that would be suitable for future Trust operations.

This report is the final product of the study. Background information has been summarized on a wide array of subjects which have direct application to future decisions and actions of the Trustees in their continuing efforts to ensure the long-term protection of Kodiak brown bears. For example, overviews are provided of: the status of brown bears and their habitats in the Kodiak Archipelago; other biological resources; Alaska land status history; the Terror Lake Hydroelectric Project; establishment of the Trust; and the Platte River Whooping Crane Habitat Maintenance Trust, Inc. (WCT) which was the legal and organizational model for the Kodiak bear Trust. A synopsis is provided of the main points raised during personal interviews with individuals who have job responsibilities affecting Kodiak brown bears or are knowledgeable

of Kodiak bears and have concerns for the future welfare of these highly important public resources.

Information gathered from the review of background materials and interviews was synthesized by subject matter and program option category. An analysis was conducted of the applicability of broad program options with respect to the administrative framework and mandates of the Trust. Options were prioritized based on the relative importance of each option to the long-term protection of Kodiak brown bears and their habitats, anticipated costs, and potential success for implementation.

All available information indicates that the construction and early operational phases of the Terror Lake Hydroelectric Project have had minimal adverse impacts on Kodiak brown bears or critical bear habitats as compared to what could have happened without the implementation of sound mitigation measures. The success to date in mitigating potential serious impacts from the Terror Lake project can be attributed to several factors, the most important being the Settlement Agreement which required, among other things: on-site biological monitoring during construction; specific stipulations for minimizing impacts to bears (e.g., oil-fired incinerators for proper garbage disposal); and various long-term mitigation measures (e.g., replacement lands for wildlife, These findings should not be establishment of the Trust). interpreted to mean that future impacts will always be minimal to Kodiak bears during the 50 year operational phase of the project.

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The WCT has been highly successful in meeting the purposes for which it was created. The substantial one-time payment of \$7.5 million to the WCT's trust account provided the necessary financial springboard to allow the WCT trustees to hire a small professional staff that began working immediately on developing a strategic plan of action with specific goals and objectives. WCT has been incorporated since inception because of business transactions involving land purchases, leases, and easements. WCT's assets have grown to more than \$13.0 million. assistance from the Nature Conservancy, the WCT has purchased over 10,000 acres of lands (current goal is 40,000 acres protected) and nearly 17 miles of river frontage important to migratory birds and other wildlife in the Big Bend reach of the Platte River. WCT's habitat protection and restoration programs are augmented by research projects, monitoring efforts, and public information and education programs that directly benefit habitat protection goals. Computerized habitat maps have been generated and are updated as necessary to reflect changed conditions. Habitat mapping and close monitoring of changes in land status have proven to be an essential element in achieving habitat protection objectives.

The Kodiak Archipelago, located in the Gulf of Alaska about 250 miles southwest of Anchorage, Alaska, is "home" to the Kodiak brown bear. Kodiak bears are a world renowned wildlife resource of local, state, national, and international importance. The current estimated population is about 2,700 to 3,000 bears and the

overall population is considered to be healthy and stable. There are approximately 4,800 square miles of bear habitat in the archipelago with about 92 percent of the habitat located on Kodiak and Afognak Islands. With the exception of several developed areas (e.g., the City of Kodiak, Terror Lake project area, logged areas on Afognak Island), most of the brown bear habitat in the archipelago is relatively pristine at this time.

Land ownership patterns in the archipelago are complex and constantly changing. The Refuge, which was established in 1941 to help protect Kodiak bears and other wildlife resources and their habitats, encompasses about 1.8 million acres of land or about 60 percent of the total brown bear habitat in the archipelago. result of the Alaska Native Claims Settlement Act (ANCSA) of 1971, about 310,000 acres of land within the Refuge have been selected conveyed to Native corporations as part of their land A large portion of the land transferred to Native entitlements. village corporations contains some of the most productive fish and wildlife habitats in the archipelago, particularly for brown bear In addition to inholdings within the Refuge, Native and salmon. corporations have entitlement to another 640,000 acres in the archipelago and individual Native allotments have been filed on There are over 50,000 acres of land belonging about 23,000 acres. to the Kodiak Island Borough and more than 650,000 acres of state land in the archipelago.

Coupled with the quilt-work of land ownership patterns in the Refuge, is the uncertainty of the true meaning of Section 22(g) of Whether or not the U.S. Fish and Wildlife Service (USFWS) has the full legal authority to control developments or other activities on private inholdings which could adversely affect fish and wildlife resources has yet to be determined. Also, there are no specific federal regulations in place which further define the meaning of Section 22(g) or provide guidance as to what would be considered environmentally acceptable land development or other human use activities. It is probably a valid assumption that more activities can and will occur on 22(g) lands than would otherwise be allowed on Refuge lands. Fortunately, both the Native corporations and the USFWS want to transfer back into public ownership the Native inholdings within the Refuge that contain important brown bear habitats; however, for various reasons, there has been little progress to date.

#### Potential Threats

In evaluating the full range of potential threats to Kodiak brown bears and their habitats, it is important to analyze Alaska's recent history, take a futuristic look (i.e., 50 to 100 years and more), and consider sources of potential impact that may lie beyond the shores of the Kodiak Archipelago. Potential threats to Kodiak bears and their habitats will come from two general sources: (1) new developments and increased human disturbances that are generated primarily on non-Refuge lands in the

archipelago; and (2) growth in human populations and exploitation of nonrenewable resources statewide, especially in Southcentral, that will have secondary "spin-off" effects on the archipelago's fish and wildlife resources.

The sharp increase in the resident human population over the last 40 years, from about 129,000 residents in 1950 to 300,000 in 1970 to 550,000 in 1990, coupled with the surge in nonresident visitors each year (three-fourth's to one million), has resulted in dramatic changes to Alaska. Added to the substantial increase in human population are the significant technological advancements in land and water transportation (e.g., three-wheelers, jet boats), aircraft, construction equipment, and fish and game harvest methods which have all accelerated the "opening-up" of Alaska.

Since the discovery of major oil and gas reserves at Prudhoe Bay in 1968, Alaska has been thrust into the international limelight of nonrenewable resources development. In some respects, Alaska is in a similar situation as many developing third world countries. There is a relatively small but growing human population which is demanding higher standards of living, there is a wealth of natural resources, and development interests will continue to exploit Alaska's nonrenewable resources for world markets, particularly as other areas become depleted.

The most likely "vehicle" for accelerating serious impacts to Kodiak bears and there habitat is the high potential for developments on private lands owned by Native corporations that are presently and will continue to seek ways to gain financial security for their shareholders. Unless conditions change significantly in the near future, the long-term economic viability of many of the Native corporations will dictate the "selling off" of many of their most prime parcels of high quality fish and wildlife lands to the highest bidders, thus losing forever any chance of comprehensive management and conservation. Incremental loses of optimum habitats over time will result in cumulative impacts that in all likelihood will cause irreparable harm to Kodiak brown bears and future public use opportunities.

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As human populations continue to grow, there will be increased demands for more recreational developments (e.g., private cabins, lodges) in private inholdings in the Refuge and on adjacent state Tourism will increase throughout Alaska and and private lands. additional human use pressures will be placed on the archipelago's more easily accessible fish and wildlife resources. For example, sport fishing opportunities in the archipelago are relatively unknown as compared to other areas (e.g., Bristol Bay drainages). As more people learn of the excellent sport fishing opportunities in the Kodiak area and as other areas become more crowded, sport fishing pressures will increase with corresponding increases in human-bear interactions and conflicts. As Alaska's commercial fisheries grow in the North Pacific, there will be continued development of onshore fish processing facilities and other associated infrastructures. Irresponsible management of mixedsalmon stocks or inadvertent overharvests, which result in escapement goals not being met, could reduce a primary food source for bear populations in affected drainages. Expanded aquaculture developments, if not carefully planned, monitored, and managed, could adversely affect wild salmon stocks, thus impacting bears.

There will be additional pressures on state officials to dispose of more state lands via leases and purchase of fee titles for commercial, residential, agricultural (e.g., livestock grazing), and recreational developments. Oil and natural gas reserves which are presently not economically viable (e.g., offshore areas in the Gulf of Alaska and Shelikof Strait) will probably be developed and coastal forests will continue to be logged (e.g., Afognak Island). These and other developments will cause an overall change in the environmental quality of the archipelago. Pristine habitats will be altered, many remote wilderness areas will become more accessible, and problems will increase with human-waste generated materials (e.g., trash and garbage, other attractants to "nuisance bears"). The number of defense of life or property kills of brown bears will undoubtedly rise. Cumulative adverse impacts will be greatest where developments occur in, or in close proximity to, high quality bear habitats, seasonal concentration areas (e.g., along major salmon streams), or in movement corridors used by a large number of bears.

#### Administration of the Trust

The Trust is a nonprofit conservation organization that is not incorporated at this time. It is administered by four Trustees representing the main parties to the Settlement Agreement. Trust Account was created in 1983 with a one-time payment of \$500,000 to initiate startup operations for the Trust. The Trust Account is exempt from federal income tax under Section 501(c)(3) of the 1954 Internal Revenue Code, as amended. As of September 30, 1991 the Trust Account had a market value of about \$841,000. The Trustees are solely responsible for determining the program directions for the Trust and deciding what projects will be authorized and funded by Trust dollars. The Trustees have been conservative in their approach to fulfilling their Trust responsibilities and have generally operated in a low-key manner. The Trustees' primary program focus to date has been on addressing Kodiak brown bear research needs. These ongoing efforts have provided valuable information on the biology, distribution, habitat use, and behavior of Kodiak brown bears. This work has been funded primarily from Trust funds, the Refuge's annual operating budgets, and state wildlife management funds.

The overall intent of the Trust Agreement is being met. However, with a relatively small Trust Account, the Trustees have been limited financially in terms of expanding programs that would involve purchase of potentially threatened bear habitats, establishing conservation easements, and implementing other protection measures. Although the Trustees have a common

understanding of Trust responsibilities and the direction they would like to see it proceed, they have not developed a strategic plan of action with specified goals and objectives. Also, there are no written administrative policies and procedures beyond those contained in the Trust Agreement. This has not necessarily disadvantaged the Trustees in their administration of the Trust to date, but it would definitely handicap the implementation of comprehensive protection strategies in the future.

#### Administrative Options

The following administrative options were developed for the Trustees to consider relative to future operations:

Option 1. Disband the Trust. There is no indication that the Trustees would want to implement this option, but it is still an action that could be taken.

Option 2. Maintain the status quo. Under this option, there would be little change in the manner by which the Trust is currently administered, except that a general plan of operation and written administrative policies could be developed to guide future Trust activities.

Option 3. Minor program development. With existing funds, the Trustees could initiate actions which would result in some minor program changes and possibly increase funding opportunities in future years. A strategic plan of operation could be developed and a cooperatively funded bear habitat prioritization and mapping project could be initiated. Cooperative bear research projects and other relatively inexpensive projects could be continued on an annual basis, once the strategic plan and habitat mapping project had been completed. Sufficient funds would be available for monitoring changes in land status and improving public understanding of the Trust and threats to Kodiak bears.

Option 4. Moderate program development and expansion. this option, the Trustees could accomplish the program initiatives discussed in Option 3, but in addition, specific actions could be taken to increase funds from sources other than the annual returns on Trust Account investments (e.g., donations from private corporations, conservation foundations and philanthropists). Implementation of this option would require that the Trustees develop a comprehensive strategic plan with specific goals and objectives. Moderate financial goals with specific timeframes for increasing funds in the Trust Account would need to be developed (e.g., a goal of \$5.0 million for the Trust Account by the year 2000). Programmatic goals would also need to be established such as the initiation of habitat protection strategies involving the purchase of fee titles or protected easements on important bear habitats that are not protected by special designation (e.g., Refuge lands). For each specific set of goals and objectives (both financial and programmatic), the Trustees would develop guidelines for accomplishing the stated goals and objectives including specific tasks, financial and human resources required, and schedules of implementation. These plans of action would be working documents that would guide future Trust operations. Ongoing Trust programs (e.g., bear research projects) would continue to operate as in the past. However, new programs and activities (e.g., implementation of habitat protection strategies) could be initiated as Trust funds increased at a moderate rate over the next few years.

Option 5. Accelerated program development and expansion. The key elements for successful implementation of this option are similar to those discussed in Option 4, but the results and benefits to Kodiak brown bears and their habitat would be much greater. The Trustees would have to spend a larger amount of funds (i.e., "seed money") initially on this option to expedite the completion of the required work products (e.g., strategic plan) and increase efforts to build Trust funds in a shorter period of time. Financial goals for this option would be more ambitious than the moderate approach but would still be realistic and certainly attainable (e.g., a goal of \$10.0 million in the Trust Account by the year 2000).

#### Program Options

Listed below (in priority order of importance) are five major program options that the Trustees should consider for future implementation. The extent to which each program could be effective will be dependent upon the Trustees' decisions and actions regarding the previously described administrative options and the timeframe required to increase funds in the Trust Account.

- 1. Conservation Planning and Fund Raising Program. This program would function as the "core" program for guiding the future direction of the Trust, other program priorities, and the overall effectiveness of Trust operations. This would be an action-oriented program that would focus on developing specific goals and objectives for the Trust, selecting the best courses of action, and obtaining the funds necessary to accomplish the desired results.
- 2. Bear Habitat Maintenance and Enhancement Program. Without positive actions being taken in the near future to gain adequate protection to high quality bear habitats that are threatened by development and other human-caused disturbances, many excellent opportunities that exist today will be lost forever. To be successful, this program must focus on the most important and vulnerable habitats throughout the brown bear range in the archipelago. All habitats should be prioritized, mapped, and computerized for continuing use in monitoring future changes and providing

quality and up-to-date information to those interested in protecting threatened areas.

- 3. Public Information and Education Program. This program would be designed to increase public awareness of Trust responsibilities and programs, the potential threats to Kodiak bears and their habitats, and options available for helping protect these valuable public resources.
- 4. Bear and Bear Habitat Research Program. Cooperative research efforts would continue as in the past. Research priorities would be established jointly by cooperating parties and funding shared. The primary focus for future research efforts funded by the Trust should be on projects that provide information on bear-habitat relationships.
- 5. Technical Assistance and Conflict Resolution Program. This program would involve working cooperatively with private landowners (e.g., Native corporations) and Kodiak Island Borough officials to reduce potential impacts on bears and their habitats resulting from future development activities on borough and private lands.

#### Protection Strategies

Given the high potential for serious impacts to Kodiak brown bears and their habitats in the 21st century and beyond, it is essential that the Trustees and other interested parties work together in a cooperative and closely coordinated manner with specific bear conservation goals and objectives that are supported by all entities. Protection strategies for brown bears and their habitat must, at a minimum, address the following elements:

- conservation policies which are supported by specific goals, objectives, and strategic plans for implementation;
- long-term protection measures for important bear habitats;
- sound management programs which are based on the best available scientific information and designed to assure sustained yield and provide long-term benefits for various public uses, both consumptive and nonconsumptive;
- research programs designed to fill biological data gaps which are directly applicable to management and conservation needs, goals, and objectives;
- conservation education programs designed to increase public understanding and appreciation of brown bears, reduce human-bear conflicts, and achieve greater protection of important bear habitats; and

• field enforcement of state and federal regulations, project permit conditions, and license authorizations promulgated to protect bears and their habitats.

Proven habitat protection strategies include: direct acquisition through purchase of private lands for conservation purposes; obtaining conservation easements, leases, and development rights (e.g., timber, mineral, oil/gas) to protect important natural areas from surface disturbances; working with private landowners to maintain voluntary specified levels of protection; and acquiring real properties or commercially salable rights to assets of no ecological value, with the intent to later sell or trade for lands important for conservation purposes.

These and other protection strategies can be applied successfully in the Kodiak Archipelago. However, conditions such as complicated land ownership patterns within the Refuge and the financial status of many Native corporations will greatly affect the type of strategies needed, the timing of implementation, and the ability to obtain the necessary funds or agreements to ensure protection in a timely manner. Also, and possibly most significant, is that the overall costs of implementation to protect all the habitats meriting special attention would be prohibitive. Thus, new and innovative protection measures should be designed and tried simultaneously while applying conventional methods on appropriate targeted sites. Some additional measures which should be pursued in the near future include:

- the use of settlement dollars for environmental damages resulting from the Exxon Valdez oil spill to help fund habitat protection actions;
- the use of assets from the Federal Deposit Insurance Corporation (FDIC) and the Resolution Trust Corporation (RTC) and surplus military lands from upcoming base closures and realignments as trading stock with Native corporations for Refuge inholdings; and
- purchase of temporary, non-development, conservation easements with options-to-buy permanent easements or fee title interests in priority habitats at a later date.

Given even the best set of conditions to implement habitat protection strategies, most unilateral efforts by one government agency or private organization will be largely unsuccessful in protecting large areas of important habitats crucial to the perpetuation of Kodiak brown bears. Therefore, the best strategy available for accomplishing the highest degree of protection is to establish conservation coalitions. The coalition(s) should be comprised of public and private sector entities with the joint purpose of focusing human and financial resources through cooperative partnerships to address priority brown bear habitat acquisitions and other bear protection needs in the archipelago.

The most important task that must be accomplished early on in any efforts to protect the most valuable bear habitats is to prioritize and map the areas of greatest concern. There is not enough time nor money "to save it all", but it is of utmost importance that those critical habitats which provide the primary life-support requirements for large numbers of Kodiak brown bears be identified and protected as soon as possible.

#### Recommendations

The Trust is in the best position of any organization to assume a leadership role in the initiation of cooperative efforts that could provide for the long-term conservation and protection of Kodiak bears. Implementation of the following recommendations by the Trustees would help expedite the conservation actions necessary for ensuring that Trust mandates are fully met and that Kodiak brown bears are protected into perpetuity.

- Select Administrative Option 4 or 5 (moderate or accelerated program development and expansion) and implement in the near future. Option 5 is the preferred option because it would result in greater benefits to Kodiak brown bears over a shorter period of time and would ensure a larger funding basis for the application of long-term habitat protection measures.
- Develop a comprehensive strategic plan of operation for guiding future Trust actions and programs. The plan should have specific goals, objectives, and targeted milestones for achieving the desired results.
- Develop an action plan with specific goals and timeframes for increasing Trust funds from outside sources.
- Initiate coalition building of private conservation organizations, resource agencies, Native corporations, and others for the purpose of combining efforts and funding to protect the most important brown bear habitats.
- Initiate an expedited process for prioritizing, mapping, and computerizing critical brown bear habitats in the archipelago which are important for the future maintenance and protection of viable Kodiak bear populations.
- Establish all suggested program options (listed in priority order of importance): Conservation Planning and Fund Raising; Bear Habitat Maintenance and Enhancement; Public Information and Education; Bear and Bear Habitat Research; and Technical Assistance and Conflict Resolution.
- Incorporate the Trust and establish a separate Trust Account corporation similar to that in effect for the WCT.

- Implement standard habitat protection strategies consistent with the Trust's operating policies, procedures, and financial capabilities. Take advantage of existing opportunities to use innovative means to achieve habitat protection objectives (e.g., oil spill settlement dollars, FDIC and RTC assets, surplus military lands).
- In conjunction with other appropriate conservation partners, establish a monitoring program for: (a) evaluating future land trades that could affect Kodiak bears; and (b) ensuring sound stewardship of protected habitat areas, including those areas obtained as a result of Trust actions.
- Initiate a cooperative program with Native village corporations to assist them in the formulation of habitat protection plans and guidelines for reducing human-bear conflicts arising from activities on their lands.
- Continue funding the current cooperative study on survival and productivity of female brown bears. Under a new cooperative agreement with the Alaska Department of Fish and Game and the USFWS, initiate a study to estimate density of bears in key areas on southwest Kodiak Island to compare with the 1987 results. The population estimates can then be refined and used as a baseline for monitoring future trends in Kodiak brown bear populations.

Successful implementation of the above recommendations could provide the foundation for a comprehensive Kodiak brown bear conservation program. As each major action is accomplished, the Trust's programs would gain additional public support and the financial and political, strengths would grow to meet the conservation challenges ahead.

# KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST ANALYSIS OF PROGRAM OPTIONS AND PRIORITIES

Prepared for:
The Kodiak Brown Bear Research and
Habitat Maintenance Trust

Prepared by: The LTN Group

Anchorage, Alaska

January 1992

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#### Preface and Acknowledgements

This report is the final product of a study sponsored by the Kodiak Brown Bear Research and Habitat Maintenance Trust (Trust) entitled, "Kodiak Brown Bear Research and Habitat Maintenance Trust--Analysis of Program Options and Priorities". The project was conducted by The LTN Group of Anchorage, Alaska under contract with the Trust's Board of Trustees (Trustees). Funds for this effort were provided solely by the Trust.

The project manager and main author of this report was Mr. Lew Pamplin, a former Director of the Division of Wildlife Conservation in the Alaska Department of Fish and Game and currently the senior biologist with The LTN Group. The project assistant was Dr. Bob Putz who serves as Director of Science for The Conservation Fund and is a former Alaska Regional Director with the U.S. Fish and Wildlife Service.

We would like to express our deep appreciation to the Trustees for their assistance, support, and encouragement throughout this study, and for their comments on the draft report. We again want to thank all the individuals who took time from their busy schedules to discuss with us their concerns, ideas, suggestions regarding Trust operations and future program priorities. We owe a special thanks to the following individuals: Vic Barnes, the bear research biologist for the Kodiak National Wildlife Refuge, for his assistance in providing background information and maps, valuable suggestions, and useful comments on the draft report; Roger Smith, the state wildlife management biologist for the Kodiak area, for his assistance and sharing some of his indepth knowledge of Kodiak brown bears; Dave Spencer, a Trustee, who provided valuable assistance in compiling useful background materials and references; and Tom Arminski of the Alaska Energy Authority for his assistance in obtaining pertinent documents and reviewing the draft report.

It is our hope that the information, options, and recommendations presented herein will provide a sound basis for the Trustees to implement comprehensive conservation strategies for helping to ensure the long-term protection of brown bears and their habitat in the Kodiak Archipelago. We intend to continue working with the Trustees and other parties interested in accomplishing this worthwhile goal.

## KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST

#### ANALYSIS OF PROGRAM OPTIONS AND PRIORITIES

#### Introduction

The Kodiak Brown Bear Research and Habitat Maintenance Trust (Trust) was established in 1981 to ensure that the Terror Lake Hydroelectric Project would not jeopardize the continued existence of Kodiak brown bears (Ursus arctos middendorffi) and to mitigate impacts of the project on brown bear habitats in and adjacent to the Kodiak National Wildlife Refuge (Refuge). The Trust functions as the most important component in the overall terrestrial mitigation plan for the Terror Lake project. The creation of the Trust was an unprecedented conservation action in Alaska because it provides a mechanism whereby project impacts and potential adverse effects from other sources on Kodiak bears can be minimized by off-site mitigation measures (e.g., acquisition of important bear habitats outside the project area).

The past 20 years have brought considerable change to Alaska in terms of increased human populations, greater demands on fish and wildlife resources, improved access to many remote wilderness areas, and increased exploitation of nonrenewable resources for world markets. In addition, many Native corporations (the state's largest group of private landowners) have experienced financial difficulties and are looking closely at all viable opportunities to achieve financial stability. There is little doubt that Alaska's fish and wildlife resources, including Kodiak brown bears and their habitats, will be subjected to even greater demands and serious adverse impacts in the future.

In recognition of the high potential for serious long-term threats to Kodiak brown bears, the Trust's Board of Trustees (Trustees) issued in May 1991 a request for proposal to:

- (a) examine the existing impacts and potential major threats to Kodiak brown bears and their habitat within and adjacent to the Refuge; and
- (b) identify, evaluate, and prioritize future program options within the scope of Trust responsibilities to undertake as part of the Trust's mandate to protect and maintain Kodiak brown bears and their habitat.

In mid-July, the Trustees awarded a project contract to conduct "An Analysis of Program Options and Priorities" for the Trust. The contract's scope of work included the following tasks:

(a) perform a detailed review of background materials on brown/grizzly bear management and conservation, land owner-

ship and use patterns in the Kodiak Archipelago and their potential impact on bear conservation;

- (b) review the administration and management of the Platte River Whooping Crane Habitat Maintenance Trust, Inc. (WCT) to gather information that might apply to the future management of the Kodiak bear Trust;
- (c) conduct interviews with representatives of resource agencies, conservation groups, Native organizations, and other appropriate parties to understand different perspectives and concerns with respect to the conservation of Kodiak bears and potential conflicts arising from future developments;
- (d) identify and prioritize specific program options which would be suitable for implementation by the Trust, given its mandates and administrative capabilities; and
- (e) provide a final report with findings and recommendations that is written in a manner that could be easily understood by the general public not directly involved in wildlife management or land use planning.

This report is the final product of the study outlined above. Background information and findings have been summarized to provide the reader with a general overview and understanding of a wide array of subject matters which have direct application to future decisions and actions of the Trustees in their continuing efforts to ensure the long-term protection of Kodiak bears. To be successful in this endeavor, it is important that the Trustees work closely with local, state, national, and international interests that can influence the future welfare of Kodiak brown bears and their habitats. Positive actions taken by the Trustees to conserve Kodiak bears could be used as a model for protecting other highly valuable fish and wildlife resources in Alaska.

#### Statement of Work

The purpose of this study was to provide the Trustees with an analysis of program options and priorities suitable for implementation by the Trust in coming years. Future program options must be within the mandate, scope, and capabilities of the Trust. The study included an evaluation of administrative options for the Trust (e.g., program development, incorporating) and an analysis and prioritization of program options (e.g., planning, research needs, habitat conservation strategies). The main work elements involved:

• a detailed review of the Trust's history, organizational structure, administrative operations, and specific projects and activities that have been authorized or funded by the Trustees since the establishment of the Trust;

- a comparative analysis of the WCT with respect to the Kodiak bear Trust;
- an examination of the environmental setting (e.g., fish and wildlife resources and human uses), land status, existing developments, and potential future developments in the Kodiak Archipelago;
- a review of the authorization process, documented environmental impacts, and mitigation features of the Terror Lake Hydroelectric Project;
- an overview of the status and trends of brown/grizzly bears in the lower 48 states, including the reasons for severe population declines and the rationale for listing the grizzly bear as "threatened" under the Endangered Species Act;
- an indepth review of the status and trends of Kodiak brown bears, past and present management programs for governing human uses, bear habitat requirements and use, human-bear interactions and proven mitigative measures to reduce conflicts, and potential threats to Kodiak bears and their habitats; and
- · report preparation.

Six major tasks were completed to accomplish the work elements listed above. These tasks were: (1) conduct a comprehensive review of background materials; (2) conduct personal interviews; (3) perform an analysis of administrative and program options applicable to future Trust operations; (4) provide the Trustees with an interim status report; (5) develop a draft report and submit to the Trustees for comment; and (6) complete final report.

In order to gain a clear understanding of the history, events, and issues which have affected or could affect the future conservation of Kodiak brown bears and their habitats, a comprehensive review was made of appropriate background materials and personal interviews were conducted. Sources of written information included published scientific literature, published reports, unpublished resource agency reports and correspondence, and popular articles.

Personal interviews were conducted in Anchorage, Kodiak, and Washington, D.C., and via telephone with many individuals, representing different organizations and viewpoints, to learn of their concerns and recommendations regarding the protection of Kodiak brown bears and options for developing future conservation strategies. Persons interviewed included: the Refuge manager and bear research biologist; regional and national administrators with the U.S. Fish and Wildlife Service (USFWS); Alaska Department of Fish and Game (ADF&G) bear biologists and the Kodiak area wildlife management biologist; representatives from state, national, and international conservation organizations; representatives of

Native corporations in the Koniag region; the Trustees or their representative; and private individuals with an interest in the future welfare of Kodiak brown bears. Notes from all meetings and interviews were summarized for future reference. Appendix I contains a list of the persons interviewed.

Information gathered from the review of background materials, interviews, and "brain storming" sessions was synthesized by subject matter and program option category. An analysis was conducted of the applicability of broad program options with respect to the administrative framework and mandates of the Trust. Preliminary program options were developed and then re-analzyed whereby some were modified and others discarded. The final options, including recommendations, were prioritized based on the relative importance of each option to the long-term protection of Kodiak brown bears and their habitat, anticipated costs, and potential success for implementation.

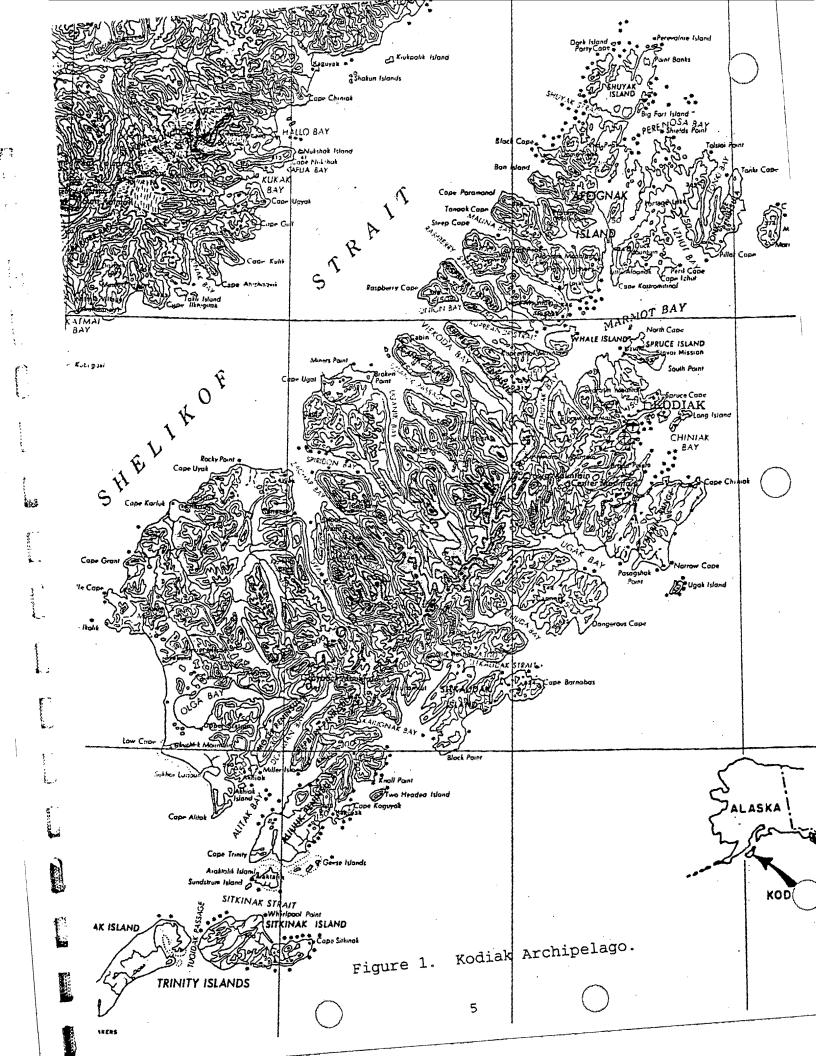
An interim status report was provided to the Trustees during a meeting held in Anchorage on October 4, 1991. Preliminary findings from the administrative reviews and biological analyses were summarized for the Trustees. Some specific program options and general priorities were discussed. A draft written report was prepared and submitted to the Trustees in November. Comments from the Trustees on the draft report were incorporated into the final report which was submitted to the Trustees in January.

#### Background

#### Area of Interest

The Kodiak Archipelago, located in the Gulf of Alaska about 250 miles southwest of Anchorage, Alaska, is "home" to the Kodiak brown bear (Figure 1). This archipelago is about 175 miles in length, nearly 70 miles wide, and encompasses a land area of approximately 5,000 square miles. It consists of 16 major islands with Kodiak and Afognak being the two largest islands, comprising about 3600 square miles and 725 square miles respectively. These two islands contain approximately 87 percent of the total landmass of the archipelago and provide most of the important habitat for Kodiak brown bears.

The archipelago has a maritime climate which is strongly influenced by weather conditions in the North Pacific Ocean. Cloudy skies, rain or snow, fog, and windstorms are common occurrences. Mean annual temperatures average about 40 degrees Fahrenheit with periods of subfreezing temperatures occurring primarily from October through April. Total annual precipitation is moderate to high (about 60 to 100 inches) with variations in amounts and duration largely dependent upon local proximity to the Pacific Ocean and terrain features. Less annual precipitation, warmer summers, and colder winters generally occur in the southern



and southwestern portions of the region as compared to the northern and eastern areas (Buck et al. 1975).

The Kodiak Archipelago is a geomorphic extension of the Chugach-Kenai Mountains on the Alaska mainland. The region was glaciated several times during the Pleistocene epoch. Glacial scouring and erosion resulted in a landscape characterized by rugged mountain ridges with peaks ranging from 2,000 to 4,000 feet above sea level, U-shaped valleys with steep hillsides, rolling hills, high mountain lakes and small ponds, and many fjords extending into the interior areas of the larger islands. The maximum distance from any inland point to saltwater is 15 miles. Except for the southwestern portion of Kodiak Island, coastlines are mostly irregular in shape with prominent headlands, rocky cliffs, narrow beaches, and numerous offshore islets. Shoreline indentions form many protected bays and estuaries. With a few exceptions, the streams are relatively small with steep gradients (particularly in the headwaters) and flow short distances before joining larger tributaries or entering the sea. Some of the larger river systems (e.g., the Karluk and Ayakulik Rivers on Kodiak Island) are less than 30 miles long, drain large glacial lakes, and flow through broad valleys, lowlands, and alluvial flats (Buck et al 1975).

Vegetation changes substantially from the most northern islands (e.g., Shuyak and Afognak), southwest through Kodiak Island, and into the most southern islands of the archipelago. northern areas are dominated by a coastal forest consisting primarily of Sitka spruce (Picea sitchensis). This forest type extends to the northeast corner of Kodiak Island where it is replaced by a moderate to dense shrub cover interspersed with The dominant shrubs are Sitka alder (Alnus grass-herb meadows. crispa sinuata) on drier sites with willow (Salix spp.) common in Other plants found in alder-willow communities wet locations. include bluejoint grass (Calamagrostis canadensis), (Epilobium angustifolium), Pacific red elder (Sambucus racemosa), salmonberry (Rubus spectabilis), devil's club (Echinopanax horridum), highbush cranberry (Viburnum edule), and ferns. cottonwood (Populus balsamifera) and Kenai birch (Betula kenaica) are common along many lowland drainages and river floodplains.

Grass-herb meadows occur as understory below cottonwood stands and in alder-willow thickets, and form extensive subalpine meadows above tree and shrublines with bluejoint grass the most common species. Other common understory and meadow plants include fireweed, salmonberry, horsetail (Equisetum arvense), cow parsnip (Heracleum lanatum), highbush cranberry, nettle (Urtica spp.), and highbush blueberry (Vaccinium ovalifolium). Alpine tundra exists above the altitudinal limit of mixed-shrub communities and grass-herb meadows. This zone is characterized by areas of barren rock and sparse vegetation with low-growing, mat-forming herbaceous and woody plants dominant and various species of grasses, sedges, and lichens present. Common plants include dwarf willows (Salix spp.), sedges (Carex spp.), crowberry (Empetrum nigrum), bearberry

(Arctostaphylos alpina) moss heath (Cassiope spp.), saxifrage (Saxifraga spp.), mountain heather (Phyllodoce aleutica), alpine blueberry (Vaccinium uliginosum alpinum), lingonberry (Vaccinium vitis-idaea), and lupine (Lupinus nootkatensis).

Large areas in many southern portions of the archipelago (e.g., southwestern Kodiak Island) are treeless with tundra vegetation covering the landscape. Plant species vary in different locations depending upon several factors including elevation, relief, moisture conditions, and exposure. In wet areas and lowlands with moist hummocks, some of the most common plants are crowberry, dwarf birch (Betula nana), blueberry (Vaccinium spp.), bog cranberry (Oxycoccus microcarpus), cloudberry (Rubus chamaemorus), Labrador tea (Ledum palustre), bluejoint grass, sedges, and mosses. On lower slopes, alder-willow thickets are interspersed with grass-herb meadows. Higher/elevations support subalpine and alpine plant communities consisting primarily of grasses, heaths, mosses, and lichens.

Along coastal beaches, brackish lagoons, and in river deltas, sedges (Carex spp.') are oftentimes the dominant vegetation and lyme grass (Elymus arenarius) may be found in narrow bands along the driftline of well drained sites. Marine aquatic plants include several kelp species, other algae, and eelgrass (Zostera marina) which occurs primarily in scattered locations in the southern end of the archipelago.

#### Fish and Wildlife Resources

The Kodiak Archipelago consists of a wide variety of terrestrial, aquatic, and marine habitats which interact to support an abundance of valuable fish and wildlife resources. Collectively, these resources provide enormous public benefits in terms of economic, recreational, scientific, educational, aesthetics, and cultural opportunities. Human uses of the region's fish and wildlife include commercial activities (e.g., commercial salmon fishing, big game guiding/outfitting, tourism), recreational pursuits (e.g., sport hunting and fishing, wildlife viewing, photography), and subsistence (e.g., hunting, fishing). The continued viability of productive fish and wildlife populations is of major importance to local and state residents, as well as from a national and an international perspective.

More than 250 species of fish, birds, and mammals have been documented in the Kodiak Archipelago. Over 300 anadramous fish streams provide spawning and rearing habitat for six species of Pacific salmon to include chinook (Oncorhynchus tshawytscha), sockeye (O. nerka), pink (O. gorbuscha), coho (O. kisutch), chum (O. keta), and steelhead trout (O. mykiss). Pink, chum, and coho are the most widespread salmonids and occur in most drainages. Dolly Varden char (Salvelinus malma) are found in nearly all bays and freshwater streams and have both resident and anadramous populations. Resident rainbow trout (O. mykiss) occur in only a

few systems and their distribution generally overlaps with steelhead. Important nearshore marine species include Pacific halibut (Hippoglossus stenolepis), Pacific herring (Clupea harengus pallasi), and several species of crab, shrimp, and clams.

The archipelago's irregular coastline with numerous rocky cliffs, islets, bays, estuarine lagoons, tideflats, and rocky cliffs, and inland alpine areas, shrub thickets, meadows, and wetlands provide diverse habitats for numerous avian species. Over 200 species of birds consisting of seabirds, waterfowl, shorebirds, passerines, upland birds, and raptors have been recorded. More than 1.5 million seabirds and seaducks overwinter in coastal waters with some of the more common species being common murres (Uria aalge), marbled murrelets (Brachyramphus marmoratus) cormorants (Phalacrocorax spp.), glaucous-winged gulls (Larus glaucescens), oldsquaws (Clangula hyemalis), harlequin ducks (Histrionicus histrionicus), and white-winged scoters (Melanitta fusca). About 1,500 to 2,000 emperor geese (Chen canagica) winter in the southern portion of the archipelago and the region supports a small nesting population of tundra swans (Cygnus columbianus). Bald eagles (Haliaeetus leucocephalus) are year-round residents and have a high breeding population with 600 to 700 nesting pairs each year. Rock ptarmigan (Lagopus mutus) and willow ptarmigan (L. lagopus) are common in alpine areas and willow thickets.

In addition to brown bear, there are five other mammal species that are indigenous to terrestrial habitats of the archipelago: red fox (Vulpes vulpes); river otter (Lutra canadensis); short-tailed weasel (Mustela erminae); tundra vole (Microtus oeconomus); and little brown bat (Myotis lucifugus). At least 14 mammal species have been introduced in the past 75 years but with varying degrees of success. The most successful transplants include: Sitka black-tailed deer (Odocoileus hemonius sitkensis); Roosevelt elk (Cervus elaphus rooseveltii); mountain goat (Oreamnos americanus); beaver (Castor canadensis); and snowshoe hare (Lepus americanus).

The biologically rich marine waters of the archipelago and rugged coastlines provide excellent habitat for a variety of marine mammal species. Steller sea lions (Eumetopias jubatus), harbor seals (Phoca vitulina), and sea otters (Enhydra lutris) are common year-round. Sea otter populations are increasing and reoccupying portions of their former range. However, populations of Steller sea lions and harbor seals have declined dramatically over the last 30 years. Other species common in the region include killer whales (Orcinus orca), Dall's porpoise (Phocoenoides dalli), and harbor porpoise (Phocoena phocoena).

#### Overview of Brown/Grizzly Bears

For many years, brown bears and grizzly bears were thought to be separate species. However, most mammal taxonomists today consider the brown and grizzly bears of North America, Europe, and Asia to

be the same species (*Ursus arctos*). The term "brown bear" is normally used to describe brown bears in coastal areas which are generally much larger than "grizzly bears" which inhabit inland areas. Except for a few areas (e.g., the islands south of Frederick Sound, Aleutian Islands west of Unimak Island), brown/grizzly bears occur throughout Alaska. Most bear populations are healthy and at stable levels. Overall, there are more brown bears in Alaska today than there were 30 years ago and, in some areas, brown bears are probably as abundant now as they have ever been (ADF&G 1980). Unfortunately, the status of brown/grizzly bears in Alaska is not representative of the habitat conditions or population trends of bears in most other areas of North America and Eurasia (Servheen 1990).

The demise of the grizzly bear is well documented for much of Canada, the conterminous "lower 48 states", and in Mexico (Craighead et al. 1982, USFWS 1982). Grizzly populations have been extirpated or drastically reduced in nearly all of their former range south of the Canadian border. Between 1800 and 1975, grizzly bear numbers dropped from estimates of over 100,000 to less than 1,000 animals (USFWS 1982). By 1890, grizzly bears were no longer present in Texas and the last of California's "golden bears" were gone by 1922. Habitat destruction, livestock depredation control, unregulated takes from commercial trapping, excessive hunting pressure, poaching, and protection of human life and property were the main causes of the declines in grizzly bear populations.

In 1975, under the authority of the Endangered Species Act (ESA), the USFWS listed the grizzly bear (U. a. horribilis) as "threatened" in the conterminous 48 states. Four years later, a grizzly bear recovery team was appointed to develop a recovery plan which would provide recommendations and actions necessary to maintain, enhance, and provide for the recovery of the grizzly. The plan's overall goal is to increase grizzly bear numbers and improve habitat conditions to a level that will no longer will require special protection under the ESA (USFWS 1982). Although this is an admirable goal, it will not be achieved for many years, if ever, because of the degree of habitat destruction that has occurred, ongoing human disturbances and human-bear conflicts, and the biological fact that brown/grizzly bears have very low reproductive rates and thus require many years to rebuild depressed populations.

#### Kodiak Brown Bears

The brown bears of the Kodiak Archipelago are a world renowned wildlife resource. Kodiak bears are unique in that: (1) they are classified as a distinct subspecies from the brown/grizzly bears which occur elsewhere in North America; (2) they are isolated by Shelikof Strait from other brown bear populations on the Alaska mainland; and (3) they are recognized as the largest land-living

carnivores on earth. Unusually large male bears may weigh up to 1,400 pounds and stand nearly 10 feet tall.

The islands of Kodiak and Afognak provide about 92 percent (4,432 square miles) of the brown bear habitat in the Kodiak Archipelago Shuyak, Raspberry, Uganik, Sitkalidak, and (Barnes et al. 1988). several smaller islands comprise the remaining eight percent (378 square miles) of available habitat. Using a mean density ratio of 0.55 bears per square mile and a mean ratio of independent bears to total bears from two different study areas on Kodiak Island, Barnes et al. (1988) estimated the total bear population in the Kodiak Archipelago to be 2,732 bears in 1987. This estimate compares favorably to the results of population work conducted earlier by Troyer and Hensel (1969) in which they estimated 2,453 bears on Kodiak and Uganik Islands. Based on those conservative population estimates and the fact that bears are difficult to census, it is highly probable that the current brown bear population of the Kodiak Archipelago approaches 3,000 animals (Vic Barnes, USFWS, pers. commun.).

Studies involving the abundance, distribution, and movements of brown bears on Kodiak Island have documented seasonal use patterns which are highly influenced by nutritional requirements and availability of food resources (Troyer and Hensel 1964, Atwell et al. 1980, Barnes 1990, Barnes et al. 1988, Smith and Van Daele 1988, Van Daele et al. 1990). Kodiak bears generally begin emerging from their winter dens in early April. Males usually leave first, followed by lone females, females with yearling and older offspring, and females with newborn cubs. Most bears on Kodiak Island have left their dens by early June (Van Daele et al. Immediately after leaving their dens, which are normally located in alpine and subalpine areas, brown bears begin foraging on mountain slopes and in lowlands where emerging vegetation is Main foods consist primarily of grasses, sedges, and available. forbs that are found in a variety of habitat types (e.g., alpine tundra, grass-herb meadows, alder-willow thickets). Bears accasionally search for carrion and other food items found along streams and beaches. As vegetation phenology progresses in higher elevations during early summer, bears in many areas move back into alpine habitats to feed on newly emerging herbaceous plants. When salmon begin returning in large numbers to natal streams in midto late-June and continuing through November in some areas (e.g., southwest Kodiak Island), many brown bears shift their primary foraging activities from eating plants to feeding on fish (Barnes 1990). As salmon numbers decline after the runs peak, bears that have been concentrating their feeding efforts on salmon, oftentimes return to mid-slope and alpine areas to feed on ripened berries prior to winter dormancy. In those areas, where salmon numbers are low or not readily accessible, bears continue to forage primarily on plant materials until denning. Most bears have entered their dens by mid-November in the northern portion of Kodiak Island, but in the southwest portion of the island, the initiation of denning by most bears is two to three weeks later

(Van Daele et al. 1990). Pregnant females and females with cubs are usually the first bears to enter dens and males are the last.

Although Kodiak bears feed primarily on plant materials and salmon, bears are opportunistic and will feed on a variety of other foods when they are available including other wild animals, livestock (e.g., cattle), fresh deer carcasses, carrion, and human garbage and trash. Competition between bears and humans for some of the same food sources (e.g., salmon, deer) and untidy human encroachments into "bear country" (e.g., open-pit garbage dumps at some seasonal fish canneries, remote village landfills, unclean field camps) oftentimes result in serious human-bear conflicts in which individual bears usually become the "losers" by sometimes being displaced but normally killed.

Management of brown bear hunting in the archipelago has progressed from an uncontrolled commercial take prior to 1925 to the present day system of tightly regulated permits, seasons, and bag limits that are based on sound biological principles. Unacceptable high harvests in some areas in the mid-1960's resulted in season closures and other restrictions being implemented by state and In 1976, the state established a limited federal authorities. hunting permit system that consisted of 26 hunting areas with a fixed number of permits assigned to each area. Since 1976, there have been only a few minor changes in the overall management program for Kodiak bears. The fall hunting season is open from October 25 to November 30 and the spring season from April 1 to Hunting activity is closely monitored in the field. mandatory hunter reports are required, and all hunters taking bears must bring the hide and skull into ADF&G's Kodiak office to be inspected and sealed (Smith 1991).

#### Land Status History

On March 30, 1867, U.S. Secretary of State William H. Seward signed the Treaty of Cession of Russian America to the United States. This action resulted in the purchase of Alaska for \$7,200,000 (about two cents per acre). From late 1867 through 1911, Alaska was administered by various federal departments (e.g., War, Treasury). In 1912, Congress passed the second Organic Act which established Alaska as a U.S. Territory and provided for a territorial legislature with limited administrative powers.

Congressional passage of the Alaska Native Allotment Act in 1906 allowed individual Aleuts, Indians, and Eskimos to acquire parcels of non-mineral lands totaling no more than 160 acres per individual. To date, about 10,000 applications have been filed with the federal government. The applications consist of approximately 15,000 parcels with a total land area of about 1.5 million acres. In the Kodiak Archipelago, applications for nearly 300 parcels have been filed and total over 23,000 acres.

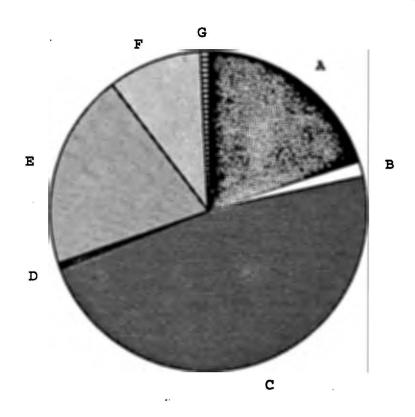
The Alaska Statehood Act was passed on July 7, 1958, and, along with other state grants, authorized the conveyance of over 104 million acres of federal land to the State of Alaska. This is approximately 28 percent of the land area in Alaska. To date, about 80 percent of the state entitlement has been conveyed by patent or tentative approval. Some of the state's earliest land selections were made on Kodiak Island and currently total more than 650,000 acres in the archipelago (Alaska Dept. of Natural Resources 1987).

The U.S. Congress passed the Alaska Native Claims Settlement Act (ANCSA) on December 18, 1971. This action provided for the settlement of all land claims by Alaska Natives and Native groups and extinguished all claims based on aboriginal rights. repealed the Alaska Native Allotment Act of 1906 but maintained provisions for individual Native allotments. Thirteen Native regional corporations and over 180 Native village corporations Twelve of the 13 regional corporations were established by ANCSA. and all village corporations were entitled to land conveyances. To date, nearly 80 percent of the Native land entitlements have been conveyed statewide through interim conveyance procedures or When completed, lands tonveyed to Alaska Natives or Native organizations will be approximately 45 million acres, or about 12 percent of the total land area in Alaska.

Koniag, Inc. is the regional Native corporation in the Kodiak Archipelago. Like the other Native regional corporations, Koniag, Inc. was organized as a business for profit corporation. The Koniag region has 13 Native village corporations, some of which are profit corporations and others are nonprofit. Land entitlements under ANCSA to the Native corporations in the Koniag region total about one million acres; this is nearly one-third of the total land area in the archipelago (see Figure 2).

In 1980, the U.S. Congress recognized the uniqueness and importance of Alaska's land and water resources when it passed the Alaska National Interest Lands Conservation Act (ANILCA). In addition to expanding the size of many existing federal parks, refuges, and forests, ANILCA established a new system of national conservation system units (CSU's) which greatly increased the number and size of national wildlife refuges, national parks, monuments, forests, and wild and scenic rivers. Of the 375 million acres of land and inland waters in Alaska, about 140 million acres are now designated as national CSU's. The remaining lands are comprised of approximately 85 million acres of other federal lands, 104 million acres of state entitlement, 45 million acres of Native lands, and one million acres in other private ownership.

The Alaska Submerged Lands Act of 1988 required, in part, that federal agencies responsible for managing CSU's report to the U.S. Congress on the status of inholdings within CSU boundaries. This was necessary because of recent changes regarding the conveyance of submerged lands whereby lands consisting of lake beds equal to



	Land Ownership Status	Acres*	% of <u>Total</u>
A.	State lands	650,000	20%
B.	Kodiak Borough lands	50,000	1%
C.	Refuge lands (excluding inholdings)	1,530,000	47%
D.	Native allotments filed	23,000	>1%
E. F.	Native village corporation lands outside Refuge Native village corporation lands	640,000	20%
G.	within Refuge	310,000	10%
	Other private lands	<u>20,000</u>	<u>&gt;1%</u>
	Total lands	3,223,000	100%

<sup>\*</sup> Acreages shown represent broad estimates.

Figure 2: Land ownership in the Kodiak Archipelago.

or greater than 50 acres, and beds of streams and rivers equal to or wider than 198 feet could not be counted against land entitlements for Natives or the State of Alaska. The end result of these changes is that more federal public lands will be conveyed to private and state ownership than would have occurred under previous interpretations of existing laws and regulations.

#### Kodiak National Wildlife Refuge

The Kodiak National Wildlife Refuge is one of 16 national wildlife refuges in Alaska and is administered by the USFWS (Figure 3). The Refuge encompasses approximately 60 percent of the total brown bear habitat in the Kodiak Archipelago and about 75 percent of the habitat on Kodiak and Uganik Islands combined.

In the late 1800's and early 1900's, brown bears were killed indiscriminately by cattle ranchers, commercial salmon fishermen, others who considered bears as undesirable competitors. Conservationists and hunters knowledgeable of the serious plight of Kodiak bears joined forces in the 1930's to initiate bear conservation actions which ultimately led to the creation of the Refuge. The Refuge was originally established by Executive Order No. 8857 on August 19, 1941 for "...protecting the natural feeding and breeding ranges of the brown bears and other The Refuge encompassed all of Uganik Island and lands on Kodiak Island south and west of the divide between the heads of Kizhuyak Bay and Ugak Bay, except for a one mile coastal strip around the boundary which remained open to settlement. total land area of the Refuge was about 1,957,000 acres. In 1958, the Secretary of Interior issued Public Land Order 1634 which changed the Refuge boundaries by including the one mile coastal strip, deleting the Kupreanof and Shearwater Peninsulas, and excluding eight Native village sites of ome square mile each. area of the Refuge was reduced to approximately 1,820,000 acres.

As a result of ANCSA, about 310,000 acres of lands within the Refuge have been selected or conveyed to Native corporations as part of their land entitlements in the Kodiak Archipelago. In addition, about 14,900 acres have been applied for as Native A large portion of the land transferred allotments (USFWS 1987). to Native village corporations contains some of the most productive fish and wildlife habitats in the archipelago, particularly for brown bear and salmon. Because ANSCA land conveyances are a transfer of property from public to private ownership, the Native corporations maintain control of access to their lands and other normal rights associated with private However, Section 22(g) of ANCSA requires that lands within national wildlife refuges which are conveyed to Native corporations "...shall remain subject to the laws and regulations governing use and development of such Refuge." Although Section 22(g), appears to mean that any development activities or uses on Native inholdings within a refuge must be compatible with the purposes for which the refuge was created and not adversely affect

Kodiak National Wildlife Refuge

Figure 3. Kodiak National Wildlife Refuge.

fee title to land, a perpetual interest in land or water, and storage of water.

#### Overview of the Whooping Crane Trust

The Platte River Whooping Crane Habitat Maintenance Trust, Inc. (WCT) served as a legal and organizational model for the establishment of the Kodiak bear Trust. The WCT has been very successful in fulfilling its mandates and continues to provide an excellent working model for evaluating program direction and administrative procedures that might be useful and applicable to future actions of the Kodiak bear Trust.

The WCT was created in 1978 after a court-approved settlement lifted an injunction against the construction of the Grayrocks Dam on Wyoming's Laramie River, a tributary to the North Platte River. The State of Nebraska and the National Wildlife Federation had objected to the project because of potentially serious downstream impacts to irrigation and wildlife habitats along the Platte River in Nebraska. The Grayrocks project sponsor, Missouri Basin Power Project, is a consortium of electric power companies operating in a multi-state area. As part of the settlement, the project owner companies funded the WCT with a one-time payment of \$7.5 million.

The WCT is a private, nonprofit organization, based in Grand Island, Nebraska. There are three trustees; one appointed from each of the parties to the settlement (i.e., State of Nebraska, National Wildlife Federation, Basin Electric Power Cooperative). The WCT's mission is to protect and maintain "...the physical, hydrological, and biological integrity of the Big Bend area so that it may continue to function as a life-support system for the Whooping Crane and other migratory species which utilize it". The Big Bend area is an 80-mile stretch of the Platte River which provides a wide diversity of habitats for over 300 species of migratory birds, including the whooping crane (Grus americana) and five other endangered bird species (Platte River Whooping Crane Habitat Maintenance Trust, Inc. 1987).

Major activities authorized by The WCT's trust declaration include: research on migratory birds and their habitats; management of land and water resources; purchase of land and water rights; and litigation to protect resources. All WCT projects are directed towards habitat maintenance, acquisition, and restoration with a goal of protecting a minimum of 40,000 acres of land in the Big Bend area in perpetuity.

The WCT has been incorporated since its beginning. A separate trust account is maintained and provides the funding for all WCT activities. The WCT corporation and trust account have their own respective board of directors (i.e., trustees) who are the same individuals but serve in both capacities. The WCT is administered by a full-time executive director who reports to the trustees. Other staff include an office manager, ornithologist, plant

ecologist, wildlife biologist, and three habitat maintenance technicians. The WCT's annual operating budget is about \$600,000. The budget is prepared by the executive director and approved by the trustees. All land purchases must be approved by the trustees. The corporation holds title to all real property (e.g., equipment, lands) and "pays the bills" including staff salaries. The trust account holds all stocks, bonds, and other investments and transfers money to the corporation to fund WCT programs (John VanDerwalker, WCT executive director, pers. commun.).

#### Findings

#### General

Contrary to the present status and future outlook of brown/grizzly bears in most of North America and Eurasia, the overall status of brown bears in Alaska is excellent. This is a result of several factors to include: (a) important brown bear habitats in most areas of the state remain intact and have not been destroyed or severely altered by large-scale development activities or other human-caused disturbances; (b) relatively recent technical improvements in monitoring bear status and trends have provided more reliable information for wildlife management and land use decisions; (c) conservative and biologically sound management programs have been implemented that ensure controlled harvests and sustained yield; and (d) the ADF&G and USFWS have increased efforts in recent years to expand and improve information and education programs for public distribution concerning proper techniques for avoiding human-bear interactions and reducing serious conflicts.

Except for the northeastern portion of Kodiak Island near the City of Kodiak, the Terror Lake Hydroelectric Project area, and several large clear-cut logging areas on Native lands on Afognak Island, most of the brown bear habitat in the Kodiak Archipelago is relatively pristine and undeveloped. Brown bear populations are stable to slightly increasing in a few areas. The overall estimated population of approximately 2,700 to 3,000 animals indicates a healthy, viable population at a relatively high level.

The USFWS and ADF&G have different authorities and legal mandates with respect to Kodiak brown bears and their habitats. In essence, the Refuge staff functions as the land manager for federal public lands contained within the boundaries of the Refuge, and the state's area wildlife biologist for the Kodiak Archipelago is primarily involved in management of Kodiak bears on all lands regardless of land ownership. In many cases, the state and federal responsibilities overlap on Refuge lands and administrative conflicts have arisen occasionally. However, both agencies have a common goal and that is to ensure the long-term protection of Kodiak brown bears and their habitats. There is excellent cooperation between the Refuge staff and the state area wildlife biologist which results from frequent coordination, good

communication, and mutual trust and respect at the field level. The agencies conduct cooperative studies and regularly assist each other on wildlife surveys and other normal work activities. This overall positive working relationship and sharing of personnel and fiscal resources have resulted in the implementation of sound land and wildlife management programs which have directly benefited Kodiak brown bears, other wildlife, and human uses.

The tightly controlled permit hunting system in place since 1976 for the Kodiak area has been highly successful from a wildlife management perspective. The existing management strategy allows for a conservative annual harvest of bears while maintaining relatively stable and high populations, provides for quality hunting conditions by distributing pressure and harvests over different permit areas, and minimizes potential conflicts with other uses. In essence, the current management strategy for Kodiak brown bears is one of the top, if not the best, brown/grizzly bear management programs in existence anywhere.

Bear research projects conducted over the last 10 years and ongoing efforts have provided valuable information on the biology, distribution, habitat use, and behavior of Kodiak brown bears. This work has been funded primarily from the Refuge's annual operating budgets, state monies, and Trust funds. There has been essentially no project funding from the USFWS' Alaska Fish and Wildlife Research Center. This lack of financial support from the research "arm" of the USFWS has resulted in some project delays and in funds having to be taken from other important Refuge programs (e.g., field enforcement activities) to ensure that the necessary bear research studies could be completed in a timely and cost-effective manner.

Coupled with the quilt-work of land ownership patterns and associated potential threats, is the uncertainty of the true meaning of Section 22(g) of ANCSA. Whether or not the USFWS has the full legal authority to control developments or other activities on private inholdings which could adversely affect fish and wildlife resources has yet to be determined. Also, there are no specific federal regulations in place which further define the meaning of Section 22(g) or provide guidance as to what would be considered environmentally acceptable land development or other human use activities. It is probably a valid assumption that more activities can and will occur on 22(g) lands than would otherwise be allowed on Refuge lands.

Closely tied to the legal and regulatory problems associated with Section 22(g) lands is the lack of progress to date in reaquiring back into public ownership those private inholdings within the Refuge that contain important brown bear habitats. This is particularly ironic because both the USFWS and the affected Native corporations want to convert the Native inholdings to public ownership. The lack of progress in achieving this common goal is due to many factors including: normal bureaucratic problems; disagreements between the USFWS and Native corporations over the

"fair market values" of the affected lands have not been resolved; specific goals, objectives, and schedules have not been established for obtaining priority inholdings; the inability or lack of concerted efforts on the part of the USFWS to work with other concerned parties to convince Congress to provide funds for high priority land acquisitions; and the failure of many federal administrators to work effectively with Native corporations which are the largest private landowners of Refuge inholdings.

#### Terror Lake Hydroelectric Project

All available information (e.g., published scientific reports, and information obtained from interviews conducted during this study) indicates that the construction and early operational phases of the Terror Lake Hydroelectric Project have had minimal adverse impacts on Kodiak brown bears or critical bear habitats as compared to what could have happened without the implementation of sound mitigation measures. For example, Smith and Van Daele (1990) found that construction activities (e.g., low-level flight operations by helicopters, construction of access roads) displaced bears from some preferred habitats (e.g., open alpine feeding areas), but after project construction was over, most of the affected bears returned to their normal habitat use patterns. total habitat permanently lost by construction of project facilities is over 1,200 acres. Fortunately, the Terror Lake impoundment was built in an area that was lightly used by bears as compared to other areas in the Terror Lake drainage. Smith and Van Daele (1990) also found no evidence that important denning areas were permanently lost as a result of the project nor were overall bear numbers reduced.

As mentioned previously in this report, the success to date in mitigating potential serious impacts from the Terror Lake project can be attributed to several factors, the most important being the Settlement Agreement which required, among other things: on-site biological monitoring during construction; specific stipulations for minimizing impacts to bears (e.g., oil-fired incinerators for proper garbage disposal); and various long-term mitigation measures (e.g., replacement lands for wildlife, establishment of the Trust). The current status of project facilities and reported findings should not be interpreted to mean that future impacts will be minimal to Kodiak bears during the 50 year operational phase of the project. Direct and cumulative negative impacts to bears and their habitats could increase, particularly if the project is expanded, or other projects are built in the surrounding area, in coming years to provide a greater electrical power generating capacity to support additional urban, industrial, and recreational developments in the Kodiak area.

#### Whooping Crane Trust

The WCT has been highly successful in meeting the purposes for which it was created and in achieving the goals and objectives

established by the WCT's board of trustees. The substantial onetime payment of \$7.5 million to the WCT's trust account provided the necessary financial springboard to allow the trustees to hire a small professional staff that began working immediately on developing a strategic plan of action with specific goals and The staff worked closely with the trustees to determine the overall long-term direction of the WCT, what they wanted to accomplish (i.e., conceptual plans), by when (i.e., schedules), and what actions they would have to take to accomplish their goals and objectives. General operating policies and procedures were formulated also to help guide WCT operations and increase credibility with the public and agencies. planning efforts and program decisions, the WCT trustees and staff try to focus on the long-term ramifications of their actions with respect to where they would like the WCT to be in 100 to 200 years from now (VanDerwalker, pers. commun.).

From its outset, the WCT has been incorporated under the laws of the State of Nebraska. This was done for several legal and administrative reasons. With corporation status, the WCT operates as a normal private business entity with little or no personal liability on the trustees or staff for any potential adverse actions arising from trust activities. Corporation status was especially prudent early on for the WCT because of obtaining title to private lands and the initiation of leases and cooperative land management agreements. Also, the WCT allows public use on many of its lands and staff are regularly operating equipment for habitat management/restoration purposes. These activities increase the level of risks associated with accidents and personal injuries on WCT lands than would otherwise be the case.

From December 1978 through 1989, the WCT's assets have grown from the original principal of \$7.5 million to more than \$13.0 million. This includes about \$500,000 in equipment, \$5.0 million in land, and the remaining assets in cash, stocks, and bonds. With assistance from the Nature Conservancy, the WCT has purchased over 10,000 acres of lands (current goal is 40,000 acres protected) and nearly 17 miles of river frontage important to migratory birds and other wildlife in the Big Bend reach of the Platte River. In addition, about nine miles of crane roosting habitat and 200 acres of grasslands have been restored.

The WCT's habitat protection and restoration programs are augmented by research projects, habitat monitoring efforts, and public information and education programs that directly benefit habitat protection goals. For example, the WCT produces a broad array of printed materials for public distribution including brochures, handouts, reports, and newsletters. Computerized habitat maps have been generated and are updated as necessary to reflect changed conditions. Habitat mapping has proven to be an essential element in achieving long-term habitat protection objectives. Habitat models also are being developed for selected bird species to aid in monitoring physical changes in the

environment (e.g., reduced river flows) and analyzing potential threats from proposed developments.

The WCT conducts cooperative work with appropriate private conservation organizations, government agencies, and others concerned with the conservation of the Big Bend area. However, WCT staff are very cognizant of the importance of maintaining WCT's own identity and independence, and the wisdom of operating in a self-sustaining manner. The WCT staff makes special efforts to work closely and in a forthright manner with local landowners and communities, thereby increasing trust between the various parties and improving the overall credibility of the WCT. Besides the development and use of planning documents for guiding and evaluating WCT programs, the staff's continuing efforts to work closely with private landowners, understand their concerns, and develop mutual trust and respect has been of crucial importance to the WCT's overall success (VanDerwalker pers. commun.).

#### Summary of Interviews

Face-to-face and telephonic interviews were extremely helpful in gathering useful information from knowledgeable individuals and in obtaining a clearer and more comprehensive understanding of the various concerns and problems related to the issue of protecting Kodiak brown bears. Provided below is a synopsis of the main points raised by the persons interviewed:

- All individuals expressed their concern for the future well-being of Kodiak brown bears and their habitats, and their willingness to work cooperatively in implementing the necessary conservation strategies to ensure protection.
- The most common concern was the fear of potential long-term adverse impacts arising from future developments (e.g., new settlements, proliferation of private cabins and recreational sites) and expansion of commercial activities (e.g., sport fishing lodges) on private lands adjacent to the Refuge and on private inholdings within Refuge boundaries, particularly on lands owned by Native corporations in the western and southern portions of Kodiak Island along the coastline and major stream systems (e.g., the Karluk River).
- There was considerable concern expressed over the increase in human uses of fish and wildlife resources in recent years (e.g., sport fishing, deer hunting) and potential conflicts with bears, and the potential adverse effects on bears resulting from wheeled plane landings being allowed in upland areas of the Refuge and the use of jet boats and all terrain vehicles to access remote areas.
- Most people felt that positive actions to protect additional bear habitat throughout the archipelago, including reaquiring of private inholdings within the Refuge, should

have started "yesterday" and that time is going to run out if actions are not implemented soon.

- Many individuals expressed their frustration that the USFWS is not doing enough to expedite habitat acquisition programs on the Refuge, particularly since the affected Native corporations want to sale or trade their inholdings for other assets of equal value. Most of these same commenters also had little hope that the State of Alaska, especially with the current administration, would take action to promote or support special habitat protection designations (e.g., state game refuge) for important brown bear habitats on state, borough, and private lands in the archipelago.
- Although most individuals were aware of the Trust, they had little familiarity with Trust responsibilities, operations, or projects, but they wanted to learn more about it and keep better informed on Trust activities.
- Some individuals believe that the Trustees should improve communications with the conservation community, Native organizations, and agency personnel directly involved in Kodiak bear conservation issues.
- Most individuals wanted to see an increase in Trust funds and an expansion of Trust operations so that the Trust can become more active in trying to protect important bear habitats in the archipelago.
- All persons interviewed felt that protection of brown bear habitat should be the Trust's number one priority.

#### Potential Threats

In evaluating the full range of potential threats to Kodiak brown bears and their habitats, it is important to take a futuristic look (i.e., think in decades not years) and consider sources of potential threat that may lie beyond the shores of the Kodiak Archipelago. It is also prudent to analyze Alaska's recent history, to gain a better understanding of the magnitude and rate of change which could and, in many cases, will occur in the next 50 to 100 years and beyond. Generally, potential threats to Kodiak bears will come from two main sources: developments and increased human disturbances that are generated primarily on non-Refuge lands in the archipelago; and (2) growth in human populations and exploitation of nonrenewable resources statewide, especially in Southcentral Alaska, will have many secondary impacts (i.e., "spin-off" effects) on the archipelago's fish and wildlife resources, wilderness values, and public uses.

Shortly after World War II, Alaska's human population was about 120,000. The 1950 census estimated 129,000 total residents with about 34,000 Alaska Natives. In 1970, there were about 300,000

residents with 51,000 Natives. By 1990, Alaska's human population had nearly doubled again to 550,000 residents of which nearly 80,000 were Natives. The sharp increase in the resident human population over the last 40 years, coupled with the surge in nonresident visitors each year (three-fourth's to one million), has resulted in dramatic changes to Alaska. Added to the substantial increase in human population are the significant technological advancements in construction equipment, land and water transportation (e.g., all-terrain vehicles, jet boats), aircraft, and fish and game harvest methods which have all accelerated the "opening-up" of Alaska.

Since the discovery of major oil and gas reserves at Prudhoe Bay in 1968, Alaska has been thrust into the international limelight of nonrenewable resources development. Alaska has been recognized as a region with an immense wealth of renewable and nonrenewable In addition to some of the largest known oil/gas reserves in the Western Hemisphere, Alaska has the last remaining major expanses of temperate rain forests in North America, worldclass mineral deposits (e.g., gold, molybdenum, copper, zinc) and enormous coal reserves. In some respects, Alaska is in a similar situation as many developing third world countries. There is a relatively small but growing human population which is demanding higher standards of living, there is enormous resource development potential, and large development interests will continue to exploit Alaska's nonrenewable resources for world markets. Based on the past 40 years and especially the last 20 years, it is logical to assume that Alaska will experience tremendous changes in human population growth and corresponding developments, industrialization, and environmental quality in the decades ahead. The rate of change in Alaska will be highly dependent upon the expansion of foreign markets such as the Pacific Rim countries (e.g., South Korea, Japan, China, Russia). Also, as other resource-rich areas of the world are depleted, more attention will be given to fully developing Alaska's vast resource potential.

The Kodiak Archipelago is part of Southcentral Alaska which is home to over two-thirds of the state's human population and has excellent resource development potential. Expansion of existing oil/gas fields, future development of known reserves which are presently not economically viable (e.g., offshore areas in the Gulf of Alaska and Shelikof Strait), and discovery of new reserves are highly probable events. New offshore drilling and production rigs, oil and natural gas pipelines, onshore storage terminals, and associated support facilities will need to be expanded to transport petroleum resources to world markets in the years ahead. The future development of hardrock mineral deposits in coastal areas will require the construction of roads to tidewater and the development of logistical support facilities. Overburden disposal, toxic waste waters, increased human-bear interactions, direct loss of fish and wildlife habitats, and increased access into pristine areas are some of the adverse impacts which will occur. Logging operations in coastal forests of the archipelago are currently underway (e.g., Afognak Island) with plans for

increased timber production in the coming years. Clear-cut logging and the construction of associated logging roads will continue to have significant negative impacts on brown bear habitats, other fish and wildlife resources, wilderness values, and public uses for many decades beyond the time when the operations cease.

As commercial fisheries expand in the North Pacific (e.g., groundfish fisheries), there will be continued development or upgrading of fish processing facilities and other associated infrastructures in the Kodiak area to support fisheries in the Gulf of Alaska. Irresponsible management of mixed-salmon stocks or inadvertent overharvests which result in escapement goals not being met in certain archipelago streams (e.g., fall runs of silver salmon) could reduce a primary food source for some bear populations in any given year. Expanded aquaculture developments, if not carefully planned, monitored, and managed could adversely affect wild salmon stocks, thus impacting bears. Sport fishing opportunities in the archipelago are relatively unknown and unexploited as compared to other areas in Southcentral (e.g., Bristol Bay drainages)! As more people learn of the excellent sport fishing opportunities in the Kodiak area and as other areas become more crowded, sport fishing pressure will increase with corresponding increases in human-bear interactions and conflicts.

Continued population growth, urban expansion, and new settlements in the Kodiak Archipelago and in other areas of Southcentral will bring increased demands for more recreational developments (e.g., private cabins, lodges) in private inholdings in the Refuge and on adjacent state and private lands. Also, greater pressures will be placed on state and borough officials to dispose of more state and borough lands via leases and purchase of fee titles for commercial, residential, and agricultural developments (e.g., As tourism increases throughout Alaska, livestock grazing). Southcentral will become even more important as a central location transportation hub for tourist-related services activities. Additional human-use pressures, both consumptive and nonconsumptive, will be placed on the archipelago's more easily accessible fish and wildlife resources (the Kodiak area is less than an hour's jet flight from Anchorage).

These combined actions will result in major changes in the overall environmental quality of many areas in the archipelago. Bear habitats will be altered and problems will increase with humanwaste generated materials (e.g., trash and garbage, other attractants to "nuisance bears"). In the more accessible areas, overharvest of some species will occur and illegal takes (i.e., poaching) will increase in number. The number of defense of life or property kills (DLP's) of Kodiak brown bears will undoubtedly rise. Eventually the total human-caused mortality on bears could reach the level whereby reductions in the annual bear harvests from legal hunting activities would be necessary to compensate for the excessive mortality resulting from increased DLP's.

As developments decrease the number and size of high quality fish and wildlife habitats, animal mortality rates rise, and human populations grow, competition and conflicts will increase substantially between user groups (i.e., commercial, sport, subsistence, and nonconsumptive). Management and conservation of all fish and wildlife populations in the archipelago will become much more difficult and costly as each year passes. Agency efforts will be directed more toward attempting to meet increasing public demands for more resource use opportunities and trying to reduce human-bear conflicts. This will decrease the operational funds and staff time available to address important bear habitat protection issues and field enforcement needs.

The high probability for continued growth in human populations and associated developments in the decades ahead give cause for serious concern with respect to maintaining the present status and trend of Kodiak brown bear populations. Even without large-scale developments, incremental and small-scale developments scattered over remote wilderness areas and increased accessibility through key access points in coastal areas will adversely affect brown bears and their habitats. Impacts will be even more severe if the "minor" developments occur in, or in close proximity to, high quality bear habitats, seasonal concentration areas (e.g., along major salmon streams), or in movement corridors used by a large number of bears. Although the Refuge encompasses more than 1.8 million acres or about 56 percent of the total land area in the archipelago, the juxtaposition of Refuge lands relative to other lands (e.g., Native village lands, state lands) and the large amount of private inholdings (about 330,000 acres) provide ample opportunities for uncontrolled, piecemeal developments to occur in some of the best brown bear habitat in the entire archipelago. Such developments, in combination with other human-caused disturbances and additional human-use pressures on fish and wildlife resources, will contribute to long-term cumulative impacts on Kodiak bears which could result in irreparable harm.

#### Administration of the Trust

The current Board of Trustees for the Trust are Messrs: Bussell, representing the AEA; Dave Cline, jointly representing the National Audubon Society, Sierra Club Legal Defense Fund, Inc., and the National Wildlife Federation; Karl Schneider, the State of Alaska; and Dave Spencer, the USFWS. Mr. Cline has served as chairman of the Trustees since the inception of the Trust's board. The Trustees serve in a volunteer capacity to the Trust and receive no monetary compensation for their services in administering Trust business or operations. Three of the Trustees are wildlife professionals with a total combined work experience in Alaska of over 80 years in dealing with fish and wildlife conservation issues, large-scale development projects, wildlife The Trust is based in management, and land use decisions. Anchorage with the Trust records maintained in the offices of the Trust chairman who is the regional vice president of the National

Audubon Society. The Trust's mailing address is 308 G Street, Suite 219, Anchorage, AK 99501-2134; telephone-(907) 276-7034.

The initial one-time payment of \$500,000 into escrow by AEA in August 1983, plus accrued interest, was used to open the first Trust Account at the Alaska Bank of the North. In October 1987, Alaska Bank of the North was declared insolvent by the Federal Deposit Insurance Corporation (FDIC). Subsequently, all deposits, loans, and trust accounts were purchased from the FDIC by the National Bank of Alaska. The Trust Account was transferred without any loss of assets and has since remained at the National Bank of Alaska. As of September 30, 1991, the market value of the Trust Account was approximately \$841,300. As stipulated by the investment strategy outlined in the Trust Agreement, Trust funds have been managed in a conservative manner with investments in low risk, high quality assets (e.g., U.S. Treasury bonds). The average annual rate of return on Trust investments has been approximately 7.2 percent which is an excellent return on conservative investments. The Trustees agreed early on that no major expenditures would be made from the Trust Account until such time that the account balance had exceeded \$600,000; that agreement was fulfilled.

The Trust is a nonprofit, private organization which is not incorporated at this time. The Trust Account is exempt from federal income tax under Section 501(c)(3) of the 1954 Internal Revenue Code. Tax exempt status was authorized in 1986.

The Trustees hold an annual meeting and prepare annual reports in January of each year which cover the previous year's activities. Copies of the annual reports are sent to all appropriate parties and are made available to the public. Other meetings have been held whenever necessary to discuss specific business items or make decisions regarding Trust projects (e.g., funding brown bear research on Refuge lands). All meetings and important actions of the Trustees are documented and filed. The Trust administrative files are well organized but require some minor updating to become current. The Trust Account financial records are accurate and complete. The Trustees meet with the Trust custodian at least once a year to discuss investments and administration of the Trust To date, the Trust has operated without any permanent or seasonal staff; all administrative tasks (e.g., preparation of annual reports) have been completed by the Trustees. Clerical assistance has been provided by the National Audubon Society's regional office assistant.

The Trustees have followed the provisions of the Trust Agreement regarding consultation with the ADF&G, USFWS, and other appropriate parties on proposed projects which may be funded, partially or in full, by Trust funds. One of the main purposes for consultation and coordination is to avoid duplication of programs or projects being conducted by government agencies or other private organizations. Also, the Trustees have pursued cooperative research efforts whereby resource agencies provide

staff salaries and some operating dollars and the remaining study costs are covered by Trust funds. In essence, Trust funds have served as a catalyst for initiating some bear research projects that may not have occurred otherwise or would have been delayed several years. The Trustees have been very conscientious about not authorizing expenditures of Trust funds on management or research projects that should be funded solely by resource management agencies (i.e., ADF&G, USFWS) or on projects and activities that are not fully justified and tied directly to the purposes for which the Trust was established. The Trustees have ensured that all expenditures from the Trust Account are documented in accordance with standard accounting procedures.

The Trustees' primary program focus to date has been on addressing Kodiak brown bear research needs as proposed jointly by the Refuge's bear research biologist and ADF&G's area wildlife management biologist. Two major projects have been authorized. The first project involved a cooperatively funded and executed one-year study, conducted in 1987, by the USFWS and ADF&G to: develop estimates of brown bear densities in dissimilar habitats in northern and southwestern Kodiak Island; and (2) estimate the size of brown bear populations in geographic units of the Kodiak Archipelago by extrapolation from density estimates (Barnes et al. Trust expenditures for this study totaled approximately \$32,900. The second project is a five-year cooperative study which commenced in 1988 and is currently ongoing. The objectives of this effort are to: (1) estimate survival rates of adult female brown bears on Kodiak Island; and (2) estimate productivity of female bears by determining the mean age of first reproduction, mean reproductive interval, and cohort survival rates for juvenile bears (Barnes and Smith 1991). Trust expenditures to date for this study total about \$40,300. Both of these studies have and will continue to provide information useful in monitoring the status and trend of the Kodiak Island bear population, managing human uses of bears, assessing long-term impacts of the Terror Lake project on bears, and gaining insight into the movements and habitat use patterns of Kodiak bears which will greatly assist in the identification of important bear habitats.

With a relatively small Trust Account, the Trustees have chosen not to expend any funds to date on land acquisitions or the purchase/leasing of conservation easements to protect high quality brown bear habitat that may be threatened by future human-caused disturbances occurring on non-Refuge lands. There has also been no expenditures on habitat management of non-government lands.

There is no question that the overall intent of the Trust Agreement is being met. The Trustees have been very conservative in their approach to fulfilling their Trust responsibilities and have generally operated in a low-key manner. Although the Trustees, individually and as a group, have a common understanding of what the Trust is all about and the direction they would like to see it proceed, they have not developed a strategic plan of action with specified goals and objectives. There are also no

written administrative policies (e.g., scope of responsibilities and activities as determined by the Trustees), program policies (e.g., criteria and guidelines for prioritizing and authorizing projects), nor operating procedures (e.g., coordination roles with other organizations and government agencies) beyond those contained in the Trust Agreement. This has not necessarily disadvantaged the Trustees in administering the Trust over the past eight years, but it would definitely handicap future efforts if the Trustees choose to expand Trust programs and activities.

#### Administrative Options

In preparing for the future, the Trustees have essentially five administrative options to consider:

Option 1. Recommend to the parties of the Settlement Agreement that the Trust be disbanded and the Trust Account dissolved. Although there is no indication that the Trustees would ever want to implement this option, it is still an action that could be taken. If this option were selected, the Trust Agreement requires that after all liabilities and obligations have been paid, the remaining properties and assets of the Trust Account shall be given to one or more charitable organizations that has preservation of the environment as a primary objective of the organization.

Option 2. Maintain the status quo. Under this option, there would be little change in the manner by which the Trust is currently administered. A general plan of operation and written administrative policies could be developed to guide standard Trust activities. Bear research projects, similar in costs to those conducted in the past, could be continued on an annual basis. A few other low cost projects could be authorized from Trust funds, such as the development of a small-scale public educational program focused on reducing human-bear conflicts. Based on the past performance of the Trust Account, current and projected interest rates, and the assumption that average annual expenditures from the Trust Account would not change significantly from recent years, the Trust Account would have an estimated market value of less than \$1.5 million by the year 2000.

Option 3. Minor program development. With existing funds, the Trustees could initiate actions which would result in some minor program changes and possibly increase funding opportunities in future years. A strategic plan of operation could be developed and a cooperatively funded bear habitat prioritization and mapping project could be initiated. Cooperative bear research projects and other relatively inexpensive projects could be continued on an annual basis once the strategic plan and habitat mapping project had been completed. The Trust Account would have sufficient funds for monitoring changes in land status and improving public

understanding of the Trust and the potential threats to Kodiak bears. However, without significant efforts to increase additional financial support from other sources (e.g., donations from private conservation foundations), there would be little funding available for habitat acquisitions and other critical protection measures.

Option 4. Moderate program development and expansion. Under this option, the Trustees could accomplish the program initiatives discussed in Option 3, but in addition, specific and well planned actions could be taken to increase funds from sources other than the annual returns on Trust Account investments. Successful implementation of this option would require that the Trustees develop a comprehensive strategic plan with specific goals and objectives and other key elements as discussed above (e.g., Trust policies). would be necessary for the purposes of expanding the Trust's public profile, building additional public support for Trust programs, and increasing funding sources and revenues for the Trust Account.; The Trustees, in all likelihood, would have to hire staff support to work on program development and/or contract specific projects and work tasks to accomplish the desired planning objectives in a timely manner. Under this option, the Trustees would establish a series of moderate goals with specific timeframes for increasing funds in the Trust Account. For example, the Trustees might set a goal of \$5.0 million for the Trust Account by the year 2000 and a minimum of 10 percent annual growth thereafter. Programmatic goals would also need to be established; for example, initiating habitat protection strategies involving the purchase of fee titles or protected easements on important bear habitats that are not protected by special designation (e.g., Refuge lands). For each specific set of goals and objectives (both financial and programmatic), the Trustees would develop guidelines for accomplishing the stated goals and objectives including specific tasks, financial and human resources required, and schedules of implementation. plans of action would be working documents that would guide various Trust activities and could be modified as conditions changed or new information became available in future years. Ongoing Trust programs (e.g., bear research projects) would continue to operate as in the past; however, new programs and activities (e.g., habitat acquisition programs) could be initiated as Trust funds increased at a moderate rate over the next few years. As public awareness and support, Trust credibility, and Trust funds increase over a gradual period of time, there could be a shift in program priorities whereby the majority of administrative and programmatic actions would be directed toward protection of priority bear habitats, continuing public education programs, and technical assistance to private landowners.

Option 5. Accelerated program development and expansion. The key elements for successful implementation of this option are similar to those discussed in Option 4, but the results and benefits to Kodiak brown bears and their habitat would be The Trustees would have to spend a larger much greater. amount of funds initially on this option in order to expedite the completion of the required work products (e.g., strategic plan) and increase efforts to build Trust funds in a shorter period of time. Financial goals for this option would be more ambitious than the moderate approach but would still be realistic and certainly attainable. For example, the Trustees could establish a goal of \$10.0 million in the Trust Account by the year 2000. This goal could be achieved in several ways depending upon the amount of "seed money" the Trustees were willing to authorize upfront to complete the necessary planning documents and initiate actions to find and obtain contributions to the Trust Account from private corporations, conservation/environmental organizations, conservation foundations and philanthropists, and other individuals that would want to help ensure the future longterm protection of Kodiak bears. By successfully implementing this option, the Trustees would have the financial capability, organizational requirements, and public support to make substantial gains in the protection of brown bear habitats and prevention of many potentially serious human-bear conflicts in the years ahead.

#### Program Options

The protection and maintenance of Kodiak brown bear populations into perpetuity can only be achieved by incorporating effective protection strategies programs that are: (1) comprehensive in scope; (2) well planned and managed; (3) regularly monitored and revised as necessary; (4) adequately funded; and (5) have the necessary human resources to obtain the desired objectives in a Assuming the Trustees discard Administrative timely manner. Option 1 (i.e., recommend to the settlement parties to disband the Trust), there are five major program options that should be The extent to which each considered for future implementation. program could be developed and be truly effective will dependent upon the Trustees' decisions and actions regarding the formulation of strategic plans for Trust programs and operations, and the timeframe required to increase substantially funds in the In other words, the selection and implementation Trust Account. of one of the administrative options discussed above will determine the future outcome and long-term effectiveness of all Trust programs. Provided below, in priority order of importance, are the program options found to be the most viable and appropriate for consideration by the Trustees. All of the following programs are within Trust mandates and abilities:

Conservation Planning and Fund Raising Program. program would function as the "core" program for guiding the future direction of the Trust, other program priorities, and the overall effectiveness of Trust operations. This would be an action-oriented program that would focus on developing specific goals and objectives for the Trust, selecting the best courses of action, and obtaining the funds necessary to accomplish the desired results. In addition to long-term planning for bear conservation purposes and related administrative support, this program would be designed to increase supplemental funding sources (e.g., private donations, state and federal grants) for the Trust Account whereby substantial gains in Trust funds could be made in a relatively short period of time. With a large annual net income to the Trust Account, other Trust programs could be expanded at a faster rate and maintained at desired levels.

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- Bear Habitat Maintenance and Enhancement Program. Successful implementation of this program is the key to the long-term protection of Kodiak brown bears. Without positive actions being taken in the near future to gain adequate protection to high quality bear habitats that are threatened by development and other human-caused disturbances, many excellent opportunities that exist today will be lost To be successful, this program must focus on the forever. identification of the most important and vulnerable habitats throughout the brown bear range in the archipelago. habitats should be mapped and computerized for continuing use monitoring future changes and providing quality information to organizations and individuals interested in helping protect threatened areas. Prioritization of habitats requiring protection and the implementation of protection strategies could be accomplished by using the techniques discussed below in "Protection Strategies". Upon completion of the habitat mapping/prioritization project and as Trust funds increase, the implementation of habitat protection strategies (e.g., acquisitions, conservation easements) should receive the majority of the Trust's annual operating funds in future years (i.e., a minimum of 65 to 70 percent).
- 3. Public Information and Education Program. This program would be designed to increase public awareness of Trust responsibilities and programs, the potential threats to Kodiak bears and their habitats, and options available for helping protect these valuable public resources. Also, useful information would be developed for public distribution on how to reduce human-bear conflicts and minimize the potential for serious encounters while in the field. Depending on the specific project, various forms of information transfer would be used to include: brochures, handouts, and pamphlets; periodic Trust newsletters, popular articles in widely read magazines, and expanded annual reports; slide shows, videos, and programs made for public

television; and Trust sponsored workshops and seminars. The more the general public knows and understands about Kodiak brown bears and potential habitat threats, the greater the chances are that long-term protection goals and objectives will be met.

- 4. Bear and Bear Habitat Research Program. Under this program, cooperative research efforts with ADF&G and the USFWS would continue as in the past. Priorities for needed research efforts would be established jointly by cooperating parties and funding shared. The primary focus for future research efforts participated in or funded by the Trust should be on projects that provide information on bear-habitat relationships and bear population trends in areas of expanded developments and increased human disturbances.
- 5. Technical Assistance and Conflict Resolution Program. This program would be designed to focus primarily on working cooperatively with private landowners (e.g., Native corporations) and Kodiak Island Borough officials in developing measures and providing information to reduce potential impacts on bears and their habitats resulting from activities on borough and private lands. Efforts would also be made to work cooperatively with sponsors and contractors of future developments, both small and large-scale, to prevent serious impacts to bears and reduce human-bear interactions during project construction and operation.

All Trust programs would require close coordination with resource agencies, conservation organizations, and other appropriate parties. Cooperative efforts and coalitions would prove to be highly beneficial to many Trust projects. However, Trust programs should always be managed in a manner that will maintain the Trust's own identity and independence.

#### Protection Strategies

#### Standard Protection Strategies

Given the high potential for serious and possible irreparable impacts to Kodiak brown bears and their habitats in the 21st century and beyond, it is essential that the Trust, government resource agencies, conservation and environmental organizations, private landowners, and other interested parties work together in a cooperative and closely coordinated manner with specific bear conservation goals and objectives that are supported by all entities. Responsibilities and specific work tasks will vary between the cooperating parties depending upon their respective authorities, organizational missions, and personnel and fiscal resources. Protection strategies for brown bears and their habitat must, at a minimum, address the following elements:

- conservation policies which are supported by specific goals, objectives, and strategic plans for implementation;
- long-term protection measures for important bear habitats;
- sound management programs which are based on the best available scientific information and designed to assure sustained yield and provide long-term benefits for various public uses, both consumptive and nonconsumptive;
- research programs designed to fill biological data gaps which are directly applicable to management and conservation needs, goals, and objectives;
- conservation education programs designed to increase public understanding and appreciation of brown bears, reduce human-bear conflicts, and achieve greater protection of important bear habitats; and
- field enforcement of state and federal regulations, project permit conditions, and license authorizations promulgated to protect bears and their habitats.

All the protection strategies mentioned above can be applied successfully in the Kodiak Archipelago. However, conditions such as complicated land ownership patterns within the Refuge and the financial status of many Native corporations will greatly affect the type of strategies needed, the timing of implementation, and the ability to obtain the necessary funds or agreements to ensure protection in a timely manner.

The two most difficult elements to achieve consistently, yet critical to the long-term protection of Kodiak brown bears, are protection of important habitats and educating the general public. Both of these protection needs fall within Trust mandates, as do strategic conservation plans and bear research projects.

Over the past 50 years, numerous habitat protection strategies have been devised and put into action in the lower 48 states and elsewhere which have proven effective in meeting conservation For example, direct acquisition through purchase of private lands for conservation purposes, either by government agencies (e.g., the USFWS) and/or private organizations (e.g., the Nature Conservancy, Ducks Unlimited, Rocky Mountain Elk Foundation, WCT), have been successful in protecting many critical Obtaining conservation easements, leases, and partial legal interests are usually less expensive, but in many cases, provide adequate levels of protection to target resources. Establishing conservation partnerships between government agencies and private organizations, have been very successful in expanding national wildlife refuges, national parks, and state public wildlife management areas. Working with private landowners to maintain a voluntary specified level of protection also has been useful in some circumstances.

Acquiring real properties or commercially salable rights to assets of no ecological value, with the intent to later sell or trade for lands important for conservation purposes, is a strategy which can be used independently or in combination with other techniques. Some private conservation organizations have begun acquiring certain development rights (e.g., timber, mineral, oil/gas) to protect important natural areas from surface disturbances which, if developed, would have serious adverse environmental impacts.

### Innovative Protection Strategies

Although the prudent application of standard land and water protection strategies and techniques can be successful in the Kodiak Archipelago, the overall costs of implementation to protect all the habitats meriting attention would be prohibitive. Thus, new and innovative protection measures should be designed and tried simultaneously while using conventional methods on appropriate candidate sites. Some additional measures which should be pursued in the near future include:

- the use of settlement dollars for environmental damages resulting from the Exxon Valdez oil spill to help fund habitat protection actions;
- the use of assets from the FDIC and the Resolution Trust Corporation (RTC), and surplus military lands from upcoming base closures and realignments as trading stock with Native corporations for Refuge inholdings; and
- purchase of temporary, non-development, conservation easements with options-to-buy permanent easements or fee title interests in priority habitats at a later date.

With the proper influence and timely initiative, it is feasible that some of the settlement damages to public resources from the Exxon Valdez oil spill could be directed to habitat protection needs for Kodiak brown bears, particularly since the Kodiak area was directly affected by this catastrophic crude oil spill. Settlement funds could be used to purchase conservation easements, development rights (e.g., timber harvests on Afognak Island), and reacquisition of contiguous private lands and inholdings within the Refuge.

Assets held by the FDIC from bank failures and RTC assets from failed savings and loan institutions total hundreds of millions of dollars in real property assets which could be used, in part, as financial incentives and trading stock with Native corporations for brown bear habitat protection transactions in the Koniag region. With congressional authorization, the sale of some RTC assets to private individuals or companies could be used as payment for conservation easements, development rights, or fee acquisitions of important wildlife lands.

A system also could be established whereby Native corporations could purchase FDIC and RTC assets at reduced costs (i.e., below minimum bid value) and then be allowed to either manage the assets or resale them at current market values. Another option would be for the Native corporations to bid on FDIC and RTC assets using their private lands as equivalent dollar value (in lieu of cash) to purchase the FDIC/RTC assets. For this to occur, the Native corporations would be required to relinquish, in writing, ownership or permanent development rights to their lands offered in the transaction. Under all scenarios, the Native corporations would have to transfer lands back into public ownership which would have total values equal to or exceeding the difference in the reduced purchase prices or bids and the real market value of the acquired FDIC/RTC assets. Congress could also exempt Native corporations from paying federal taxes on any profits gained in the transactions, and provide additional tax breaks for transfer of lands for conservation purpose's, or other financial incentives (e.g., debt relief equivalents for permanent protection of high quality wildlife habitats). A modification of this concept would be to allow private investors to jointly purchase with Native corporations reduced-valued FDIC/RTC assets, or buy the assets directly from the Native corporations and, in either case, allow the private investors to receive the conservation tax breaks.

Over the next six years, nearly 9% of the military installations in the continental U.S. (38 bases) will be closed to reduce the Department of Defense's annual operating budget. An additional 48 bases will be affected by realignments of certain military functions to other facilities. As a result of these actions, thousands of acres of commercially valuable lands will be surplused. Federal agencies, state and municipal governments, and the private sector will have numerous opportunities to acquire properties at relatively low costs. Some of the excess military lands could be made available to Native corporations under first right-of-refusal provisions before going out to public bid. As with RTC assets, several options could be developed to provide cash and profit incentives to the Native corporations in exchange for tax breaks and equivalent valued Refuge inholdings.

Using a combination of funding and asset sources obtained from implementing the strategies discussed above, funds from the Trust Account (and other sources as well) could be used to purchase fee titles in selected properties or temporary, non-development, conservation easements on future target acquisitions. easement contracts would be valid for specified time periods five to ten years) and would include option-to-buy provisions, based on mutually agreeable purchase prices at the time of the contracts. Final purchases would be contingent upon the ability of cooperating partners to obtain the necessary funds to buy the desired properties or establish permanent easements by the end of the contract periods. During the easement/option contract periods, there could be no changes in land status; the subject lands could not be sold or leased to other parties, subdivided into recreational or other categories of smaller

parcels, and no developments of any kind could occur. This process could provide intermediate protection of important brown bear habitats while cooperative efforts are made to secure funds through congressional appropriations or other means to obtain permanent protection status.

# Conservation Partnerships/Coalitions

Like other private entities, the Trust has no legislative mandate or authority to manage and protect public resources (i.e., brown bears); those authorities lie with government resource agencies (e.g., ADF&G and USFWS). Therefore, when dealing with public agencies, the Trust must normally operate in an advisory capacity on such items as: agency regulations governing human uses or environmental protection; wildlife management plans; land use plans; proposed developments; and other activities sponsored or authorized by the respective agencies. However, as a private conservation organization, the Trust can initiate independent or joint conservation efforts on habitat protection strategies and acquisition priorities, public education programs, and other On projects involving multiple parties, cooperative agreements, like what is currently being done on Trust/agency bear research projects, or other administrative means could be used to accomplish program objectives.

Given even the best set of conditions and abilities to implement habitat protection strategies, most unilateral efforts by one government agency or private organization will be largely unsuccessful in protecting large areas of important habitats crucial to the perpetuation of Kodiak brown bears. Among the many factors which will affect the potential success of future conservation efforts are the high costs of lands, competing development interests trying to exploit nonrenewable resources, and the desire of the archipelago's largest private landowners (i.e., Native village corporations) to become financially solvent. Therefore, the best strategy available for accomplishing the highest degree of protection is to establish conservation coalitions. The coalition(s) should be comprised of public and private sector entities with the joint purpose of focusing human and financial resources through cooperative partnerships to address priority brown bear habitat acquisitions in the archipelago. A listing of some potential conservation partners is presented in Appendix IV.

To illustrate, a Trust-sponsored coalition, consisting of several private conservation organizations (e.g., the Nature Conservancy), user groups (e.g., big game guides), and Native corporations could be formed to work with the USFWS and other government agencies on Kodiak Island to develop a mutually agreed upon strategy for ensuring the long-term protection of critical bear habitats or access areas to critical habitats, while working cooperatively with the regional and village corporations to achieve their financial objectives. By using a combination of non-development

conservation easements, trade lands, lease options, and other means, short-term protection measures could be obtained while cooperative efforts are directed at Congress to provide federal programs and the necessary funding for reacquiring priority inholdings back into Refuge ownership.

# Prioritization of Important Habitats

The most important task that must be accomplished early on in any coordinated efforts to protect the most valuable bear habitats is to prioritize, map, and computerize the areas of greatest concern. This can be accomplished by using a focused systematic process with analytical procedures to define the most important priorities. This process should incorporate the best available biological information and sound professional judgement in deciding what areas deserve special attention. There is not enough time nor money "to save it all" and from a biological perspective it is not necessary nor warranted. What is most important, is the protection of those critical habitats which provide the primary life-support requirements for large numbers of Kodiak brown bears. General procedures for prioritizing critical areas include:

- 1. Divide the brown bear range of the Kodiak Archipelago into geographical units that are logical and easily delineated on topographic maps, irrespective of land ownership boundaries.
- 2. Conduct an assessment of each unit's biological values as pertains to brown bears and human use values; then prioritize the areas based on their overall values. The assessment criteria should include items such as estimated bear densities and populations, habitat quality, and uniqueness.
- 3. Once the initial assessments are complete, overlay the identified areas with land ownership boundaries and re-evaluate the area priorities with respect to potential development threats, including increased access potential, and whether or not the area is "protected" by some special land designation (e.g., Refuge status). Re-prioritize the areas based on anticipated threats and estimated costs to protect candidate areas.
- 4. Determine the protection strategy(ies) that should be applied to each priority and develop a site-specific protection plan for each priority area.
- 5. Implement the protection plans and establish a monitoring program to ensure proper stewardship.

The highest degree of success in this endeavor, would be achieved by using conservation partnerships (e.g., Trust/USFWS/ADF&G) from the outset of the initial planning and assessment phases. In this

manner, human and financial resources could be combined in a joint effort which should result in higher quality and more timely products. Also, by working closely with conservation partners, all players would have ownership in the development and selection of brown bear protection priorities. Thus, everyone would probably work harder to achieve the protection goals.

# Conclusions

With human populations continuing to grow worldwide and renewable and nonrenewable resources becoming more depleted in other resource-rich areas of the earth, many large-scale developments will undoubtedly be constructed in Alaska over the coming decades. As developments increase statewide, particularly those that occur in Southcentral, secondary effects will result in adverse impacts to fish and wildlife resources of the Kodiak Archipelago, including Kodiak brown bears. Future alterations of high quality bear habitats in the archipelago resulting from piecemeal and incremental developments, improved accessibility into remote wilderness areas from key access points, expanded human uses of fish and wildlife resources, increased human-bear interactions and conflicts, and long-term cumulative impacts are the greatest threats to Kodiak brown bears.

As efforts increase to expand developments across the state, greater opportunities will arise for private individuals and corporate organizations to influence land exchanges and trades for development rights, profit sharing, and necessary government approvals. Federal and state officials interested in resource exploitation or protection will also be significant players as all interested parties maneuver for the best deals possible. Future land exchanges will alter present land ownership patterns and have varying degrees of impacts on fish and wildlife resources, including Kodiak bears and their habitat. It is very important that the Trustees monitor all future land trades and exchanges that could affect high quality bear habitats in the archipelago.

The most likely "vehicle" for accelerating serious impacts to bears and their habitats is the high potential for developments on private lands owned by Native corporations that are presently and will continue to seek ways to gain financial security for their shareholders. Unless conditions change significantly in the near future, the long-term economic viability of many of the Native corporations will dictate the "selling off" of many of their most prime parcels of high quality fish and wildlife lands to the highest bidders, thus losing forever any chance of comprehensive management and conservation. Incremental losses of optimum habitats over time will result in far-reaching cumulative impacts that in all likelihood will cause irreparable harm to Kodiak brown bears and future public use opportunities.

More than any other mitigation feature associated with the Terror Lake Hydroelectric Project, the Trust has the greatest potential for long-term success in protecting Kodiak bears and their habitats. The Trustees need to look far into the future when considering conceptual plans and the actions necessary to meet Trust mandates and responsibilities. The Trust's number one priority should be the protection and maintenance of important brown bear habitats throughout the archipelago. To accomplish this goal, the Trustees are going to have to work diligently with concerned parties to increase funds in the Trust Account three to four-fold in the next few years. Comprehensive bear conservation programs must be developed with specific goals, objectives, and schedules for implementation. To be most effective, the Trustees should establish conservation partnerships and coalitions to work cooperatively in the implementation of protection strategies.

If the Trustees decide to maintain the status quo (Administrative Option 2), it is not necessary to incorporate at this time. However, if the Trustees choose to expand programs and become directly involved in protecting bear habitats through the use of land transactions of any kind, then the Trust should be incorporated with the end products being a Trust Corporation and a separate Trust Account similar to that in effect for the WCT.

For more than five decades, the brown bears of the Kodiak Archipelago have received worldwide attention and been recognized as one of the most unique wildlife resources on the earth. year (1991) marks the 50th anniversary of the establishment of the This celebration, plus recent efforts by certain Native village corporations in the Koniag region to increase public knowledge of the dilemmas associated with Native inholdings within the Refuge (i.e., desire to protect the land but the need to develop or sell it for economic reasons), have focused greater national attention on and concern for the future welfare of Kodiak The national news media (e.g., nationwide TV networks and magazines) and some international broadcasting companies continue to run special features on Kodiak bears and the potential threats from changing land status, more developments, and increasing human This renewed and accelerated public awareness provides an excellent opportunity for the Trust and other concerned parties to begin constructive and cooperative efforts to provide a greater degree of protection in the future for Kodiak brown bears than currently exists today.

#### Recommendations

Kodiak brown bears, their habitats, and the public would benefit greatly for many decades to come from the expansion of Trust programs and activities in the near future. The Trustees are in the best position of any organization, public or private, to assume a leadership role in the initiation of cooperative efforts that would provide for the long-term conservation and protection of Kodiak bears. Implementation of the following recommendations would help expedite the administrative processes and programs necessary for ensuring that Trust mandates are fully met and that Kodiak brown bears are protected into perpetuity.

The Trustees should select one of the five administrative options identified for guiding future Trust operations and programs:

Option 1 (dissolve Trust): Not recommended.

Option 2 (maintain status quo): Not recommended. Implementation of this option would continue only to provide supporting information to agency programs and not directly address the greatest potential threats to Kodiak bears and their habitats.

Option 3 (minor program development): Not recommended. This option could result in the completion of a general plan of operation governing future Trust actions (e.g., scope of activities that would be considered, geographic extent, types of work to be funded), continuation of ongoing research efforts, and the initiation of a few additional projects (e.g., habitat prioritization and mapping, small-scale public information and education program). However, there would be little opportunity or funds available in the next few years to make meaningful progress in the initiation of comprehensive habitat protection strategies.

Options 4 or 5 (moderate or accelerated program development and expansion): Recommend the Trustees implement either option, but preferably Option 5. This option would result in greater benefits to Kodiak brown bears over a shorter period of time and would ensure a larger funding basis for the application of long-term habitat protection measures.

If Option 4 or 5 is selected, the Trustees should initiate the following actions in a timely manner:

- Develop a strategic plan for guiding future Trust actions and programs. The plan should have specific goals, objectives, and targeted milestones for achieving the desired results. Policies should be formulated for Trust roles and responsibilities, future program priorities, coordination with other organizations, and other operating procedures.
- Develop an action plan with specific goals and timeframes for increasing Trust funds from outside sources (e.g., national conservation organizations, private conservation foundations, major corporate businesses).
- Initiate coalition building of private conservation organizations, resource agencies, Native corporations from the Koniag region, and other appropriate parties for the purposes of combining efforts and funding to protect the most important brown bear habitats in the Kodiak Archipelago. The Trustees should serve as the chair of the coalition and provide the overall direction.

- As soon as possible, initiate a comprehensive but expedited process for identifying, mapping, and prioritizing brown bear habitats which are important for the future maintenance and protection of viable Kodiak brown bear populations. If established, the bear conservation coalition could be used to achieve concurrence on priority acquisitions, implementation of protection strategies, and initiation of fund raising efforts to accomplish objectives.
- Establish all five suggested program options (listed in priority order of importance): Conservation Planning and Fund Raising; Bear Habitat Maintenance and Enhancement; Public Information and Education; Bear and Bear Habitat Research; and Technical Assistance and Conflict Resolution.
- Take the necessary legal steps to incorporate the Trust and establish a separate Trust Account corporation similar to that in effect for the WCT.
- Implement standard habitat protection strategies consistent with the Trust's operating policies and procedures. Take advantage of existing and future opportunities to use new and innovative means to achieve protection objectives (e.g., oil spill settlement dollars, assets from the FDIC and RTC, surplus military lands).
- In conjunction with other appropriate conservation partners, establish a monitoring program for: (a) evaluating future land trades that could affect Kodiak bears; and (b) ensuring sound stewardship of protected habitat areas, including those areas obtained as a result of Trust actions.
- Initiate a cooperative program with Native corporations in the Koniag region to assist them in the formulation of habitat protection plans and guidelines for reducing humanbear conflicts arising from activities on their lands.
- Continue funding the current cooperative study on survival and productivity of female brown bears. Under a new cooperative agreement with ADF&G and the USFWS, initiate a study to estimate density of bears in key areas on southwest Kodiak Island to compare with the 1987 results. The population estimates can then be refined and used as a baseline for monitoring future trends in bear populations.

Successful implementation of the above recommendations could provide the foundation for a comprehensive Kodiak brown bear conservation program. As each major action is accomplished, the Trust's programs would gain additional public support and the financial and political strengths would grow to meet the conservation challenges ahead.

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PERSONAL INTERVIEWS

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#### PERSONAL INTERVIEWS

Provided below is a list of persons interviewed for background information, their concerns, and recommendations regarding future options and priorities for the Kodiak Brown Bear Research and Habitat Maintenance Trust. Several other persons were interviewed but requested that they remain anonymous.

#### Name

# Tom Arminski Vic Barnes Jay Bellinger Don Berry Dave Cline\* Kevin Delanev Ralph Eluska Darrell Farmen

Dick Hensel Jack Hession Hank Hosking Roy Jones Patrick Noonan Doug Miller

Uwe Gross

Sterling Miller Butch Patterson Tim Richardson Harry Reynolds John Rodgers Dick Rohrer Susan Ruddy Jim Scape Karl Scheinder\*

Paul Schmidt Roger Smith John Schoen Dave Spencer\* John Turner

John VanDerwalker

Randall Weiner

# Organization and Location

Alaska Energy Authority, Anchorage USFWS, Kodiak Refuge, Kodiak USFWS, Kodiak Refuge, Kodiak

World Wildlife Fund, Washington, D.C. National Audubon Society, Anchorage

ADF&G, Sport Fish Div., Anchorage

Akhiok Kaguyak, Inc., Anchorage Kodiak big game guide, Anchorage

Koniag, Inc., Anchorage USFWS (retired), Anchorage

Sierra Club, Anchorage

USFWS, Maine

Birch/Horton/Bittner/& Cherot, Wash., D.C. The Conservation Fund, Washington, D.C. National Wildlife Federation, Anchorage

ADF&G, Wildlife Conserva. Div., Anchorage

USFWS, Kodiak Refuge, Kodiak

State Federal Reporter, Washington, D.C.

ADF&G, Wildlife Conserva. Div., Fairbanks

USFWS, Anchorage

Kodiak big game guide, Kodiak The Nature Conservancy, Anchorage World Wildlife Fund, Washington, D.C.

ADF&G, Wildlife Conserva. Div., Anchorage

USFWS, Anchorage

ADF&G, Wildlife Conservation Div., Kodiak

ADF&G, Wildlife Conserva. Div., Fairbanks

USFWS (retired), Anchorage

USFWS, Washington, D.C.

Whooping Crane Trust, Nebraska Trustees for Alaska, Anchorage

<sup>\*</sup> Trustee of the Kodiak Brown Bear Research and Habitat Maintenance Trust.

SETTLEMENT AGREEMENT FOR THE

TERROR LAKE HYDRÓELECTRIC PROJECT

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Kodiak Electric Association, Inc.

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Project No. 2743 Terror Lake

# OFFER OF SETTLEMENT

- l. The undersigned parties to this proceeding hereby submit this Offer of Settlement pursuant to 18 C.F.R. \$1.18(e). No hearing has been ordered in this proceeding.
- 2. The following documents are attached hereto and incorporated herein:
  - Exhibit No. 1-"Agreement among Kodiak Electric Association, Inc., the Department of the Interior, the State of Alaska, the Sierra Club, the Audubon Society, and the National Wildlife Federation Relative to Terror Lake Project," entered into June 26, 1981.
  - Exhibit No. 2-Explanatory Statement for Offer of Settlement.
  - Exhibit No. 3-Kodiak Brown Bear Research and Habitat Maintenance Trust Declaration.
  - Exhibit No. 4-List of Documents Relevant to Settlement.
  - Exhibit No. 5-Notice of Date Comments on Settlement are due.
  - Exhibit No. 6-Proposed Order Approving settlement.
- 3. The terms of the settlement are as follows: (1) all allegations and issues raised in this license proceeding by the Department of the Interior, the State of Alaska, the Sierra Club, the Audubon Society and the National Wildlife Federation are, except as otherwise provided in Exhibit No. 1, hereby settled; (2) each party referred to in clause (1) withdraws any objection to issuance by the Commission of a license to Kodiak Electric Association, Inc. for Project No. 2743 conforming to Exhibit No.

1; and (3) a license is issued to Kodiak Electric Association, Inc. conforming to Exhibit No. 1.

Respectfully submitted,

Duncan, Weinberg & Miller, P.C.

Kemppel, Huffman & Ginder

Attorneys for Kodiak Electric Association, Inc.

the Interior

actorney For the

of Alaska

Legal Defense Fund, Attorneys for Sierra Club, Inc., Audubon Society and National Wildlife Federation

September 8. 1981

AGREEMENT AMONG KODIAK ELECTRIC ASSOCIATION, INC.,
THE DEPARTMENT OF THE INTERIOR, THE STATE OF ALASKA,
THE SIERRA CLUB, THE NATIONAL AUDUBON SOCIETY,
AND THE NATIONAL WILDLIFE FEDERATION
RELATIVE TO TERROR LAKE PROJECT

On June 16, 1981 representatives of the parties to this agreement met in Juneau, Alaska, in the office of the Commissioner of Natural Resources, State of Alaska. On that date the parties made and entered into this agreement, with Keith D. Bayha, Assistant Regional Director for Environment, United States Fish and Wildlife Service, representing the United States Secretary of the Interior and Ronald O. Skoog, Commissioner of Fish and Game, and Geoffrey Haynes, Deputy Commissioner of Natural Resources, representing the State of Alaska.

THIS AGREEMENT is confirmed this 26 day of 1000 . 1981, by, between and among Kodiak Electric Association, Inc. (KEA), the United States Department of the Interior (Interior), the State of Alaska (State), the Sierra Club (Sierra), the National Audubon Society (Audubon), and the National Wildlife Federation (NWF).

In explanation the parties recite the following:

- A. KEA has applied to the Federal Energy Regulatory Commission (FERC) for a license pursuant to the Federal Power Act, 16 U.S.C. §797, to construct and operate the Terror Lake Hydroelectric Project (Project No. 2743). Interior, the State, Sierra, Audubon and NWF are intervenors in the proceeding by which FERC is considering KEA's application.
- B. Project No. 2743 will be partially located on lands within the Kodiak National Wildlife Refuge, Alaska (Rafuge).

- C. The construction of the Terror Lake

  Hydroelectric Project will be in the interest of the
  people of the State of Alaska.
- D. Construction and operation of Project No. 2743 will impact interests of State and Interior and will affect fish and wildlife resources and their habitats. Interior, State, KEA, Sierra, Audubon and NWF have differed as to the extent to which Project No. 2743 will have significant adverse effects upon fish and wildlife resources and their habitat, as to appropriate mitigation measures, and as to jurisdictional matters.
- E. KEA, State, Interior, Sierra, Audubon and NWF desire to settle all of their outstanding differences. Interior and State, in order to facilitate settlement and to achieve mutual objectives of conservation and management of fish and wildlife resources within their respective jurisdictions, are willing to enter into a cooperative agreement for the protection of Kodiak brown bear and other wildlife species.

NOW THEREFORE, the parties hereto agree as follows:

## 1. Replacement Habitat

In recognition of the need to mitigate adverse environmental effects of the project, the State of Alaska Departments of Natural Resources and of Fish and Game, and the United States Department of the Interior, Fish and Wildlife Service, have entered into a Cooperative Management Agreement, a copy of which is attached hereto as Attachment I and incorporated herein by reference.

#### Height of Dam

2.01 To the end of minimizing adverse construction impacts and facilitating the maintenance of instream flows in salmon spawning habitat in the Terror River.

NEA will, as a part of the original construction of

Terror Lake Dam, provide increased storage capacity in Terror Lake Reservoir. The increased capacity will be that ordered by FERC based upon the Instream Flow Mitigation Plan, the discussion contained in Paragraph 5.8 of the DEIS (attached as II-A to Attachment II), and further engineering studies currently being conducted by KEA and which will be filed with FERC, and the intervenors will not object to such construction.

2.02 The Instream Flow Mitigation Plan, attached hereto as Attachment II and incorporated herein by reference, will be incorporated into the project license as a license condition and it is so recommended to FERC.

# 3. Mirigation

3.01 The mitigation measures provided for in this agreement (a) satisfy all requirements imposed by or pursuant to applicable federal law for the mitigation of any and all adverse effects of Project No. 2743 on fish and wildlife resources and their habitats; and (b) constitute the conditions prescribed by the Secretary of the Interior pursuant to Section 4(e) of the Federal Power Act (16 U.S.C. §797[e][ as necessary for the adequate protection and utilization of the Refuge.

3.02 This agreement satisfies any and all applicable requirements of the Fish and Wildlife Coordination Act (16 U.S.C. §661), the National Wildlife Refuge Systems Administration Act (16 U.S.C. §663dd), the Federal Land Policy and Management Act (43 U.S.C. §1701) and of the first proviso in Section 4(e) of the Federal Power Act (16 U.S.C. §797[e]).

3.03 No party will challenge the adequacy of the Final Environmental Impact Statement on any of the grounds settled by this agreement nor attempt to impose upon KEA in respect of Project No. 2743 any requirement in addition to those imposed by this agreement and the license issued by FERC. However, nothing herein shall prevent the State from discharging any of its responsibilities under State laws or regulations or preclude a party from petitioning FERC to enforce or interpret any provisions of the license.

3.04 The parties understand that the Kodiak Island Borough will agree to prohibit grazing on any Borough lands in the area covered by the Cooperative Management Agreement (Attachment I). This agreement is contingent upon the enactment of Borough regulations to that effect.

#### 4. Miscellaneous Provisions

4.01 KEA, Sierra, Audubon and NWF will jointly recommend to the Alaska Legislature that it enact legislation to authorize, and to provide adequate funding for, a Kodiak Island alternate energy study.

4.02 KEA, as soon as practicable, will establish a trust fund with a capital contribution of \$500,000 for the purpose of funding, out of net income from the trust fund, programs approved by the trustees of the fund for Kodiak brown bear research and other activities, including acquisition of land or rights therein, determined by the trustees of the fund to be of benefit to the Kodiak brown bear. The trustees shall be governed by the following:

a. There shall be four trustees, one to be named by KEA; one to be named jointly by the Sierra Club Legal Defense Fund, Inc., Audubon and NWF; one to be named by the Governor of Alaska; and one to be named by the Regional Director of the U.S. Fish & Wildlife Service unless otherwise prohibited by law.

- b. The trust must be so established as to qualify and function as an entity exampt from federal income tax under the Internal Revenue Code of 1954, as amended.
- c. The principal of the trust must not be invaded except by the unanimous vote of the trustees
  and subject to other limitations to be provided in the
  trust declaration.
- d. KEA shall consult with the other parties hereto in preparing the trust declaration.
- 4.03 In order to minimize bear-human conflict and otherwise to avoid adverse impact on the Kodiak brown bear and its habitat, the parties agree that no recreation facilities should be required in the license and so recommend to FERC.
- 4.04 The stipulations set out in Attachment
  III (attached hereto and incorporated herein by reference)
  will be incorporated into the license and so recommend
  to PERC.

# 5. Effectuation of Settlement

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5.01 This agreement and the Offer of Settlement referred to in Paragraph 5.02, when approved by FERC, settles and adjusts all disputes between and among any and all of the parties relative to the Terror Lake Hydroelectric Project. It does not constitute a Vaiver of the position of any of the parties with respect to Mt. Glottof, Hidden Basin or Uganik diversions or any other project, proposal or circumstance; nor does it constitute approval or precedent for application of the provisions of this agreement, or of any matter dealt with herein, to any other project, proposal or circumstance.

5.02 This agreement constitutes a scipulated Offer of Settlement executed by Interior, KEA, the

State, Sierra, Jubon and NWF to be filed with the assurprovided in 18 C.F.R. §1.18 as an Offer of Settlement in the license proceedings now pending for Project No. 2743. Each party withdraws any objection to issuance of a license for Project No. 2743 to KEA conforming to the Offer of Settlement.

5.03 This agreement terminates and is of no force and effect if FERC fails to approve the Offer of Settlement referred to in Paragraph 5.02 or in the event that FERC rejects KEA's application for license and the rejection becomes final.

# 6. Section Headings

Section headings are intended for reference purposes only and form no substantive part of; nor do they interpret, any provision of this agreement.

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IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written.

ATTEST:

THE DEPARTMENT OF THE INTERIOR

By: White P. How ATTEST:

THE STATE OF ALASKA

RODIAK ELECTRIC ASSOCIATION, INC.

WHEN ATTEST:

THE SIERRA CLUB

ST: White P. How ATTEST:

THE STATE OF ALASKA

THE SIERRA CLUB

THE NATIONAL AUDUSON SOCIETY

ATTEST:

THE NATIONAL WILDLIFE FEDERATION

3y:

Appendix III

KODIAK BROWN BEAR RESEARCH AND

HABITAT MAINTENANCE TRUST AGREEMENT

# KODIAK BROWN BEAR RESEARCH AND HABITAT MAINTENANCE TRUST AGREEMENT

- ESTABLISHMENT OF TRUST ACCOUNT. (a) In order to insure that the construction and operation of the Terror Lake Hydroelectric Project, the license for which was assigned to the Authority by the Federal Energy Regulatory Commission on May 12, 1982 (Project No. 2743), does not jeopardize the continued existence of the Kodiak Brown Bear (Ursus arctos middendoffi) and to mitigate the impacts of the project on Kodiak Brown Bear Habitat in and adjacent to the Kodiak National Wildlife Refuge on Kodiak Island, Alaska, the Alaska Power Authority (the "Authority") agrees, in satisfaction of an element of the settlement agreement dated June 26, 1981, among Kodiak Electric Association, Inc., the Department of the Interior, the State of Alaska, the Sierra Club, the National Audubon Society, and the National Wildlife Federation, which settlement agreement is into a stipulated offer of Project 2743 executed by those parties which was approved by the Federal Energy Regulatory Commission on October 5, 1981, to establish the Trust Account.
- written notice from the Trustees designated under III of this Agreement (the "Trustees"), will convey to the Trustees the initial principal of the Kodiak Brown Bear Research and Habitat Maintenance Trust Account (the "Trust Account"), plus whatever interest has accrued on this initial principal since its placement in escrow in July, 1983. The conveyance will be made in the form of a check. Payment of the check acknowledges its receipt by the Trustees. However, if the Authority does not receive written notice from the Trustees under this section before July 1, 1985, this Agreement terminates and has no effect, and the Authority will have no obligation to convey any amount to

the Trustees for the purpose of this Agreement or for any other purpose.

- II. PURPOSES OF TRUST ACCOUNT. (a) The purpose of the Trust Account is to operate exclusively in connection with the carrying out of certain purposes of the State of Alaska, the National Audubon Society, the National Wildlife Federation, and the Sierra Club Legal Defense Fund, Inc., by financing programs, activities, and acquisitions to protect and maintain the Kodiak Brown Bear and its habitat in and adjacent to the Kodiak National Wildlife Refuge on Kodiak Island, Alaska ("Kodiak Brown Bear habitat"). The programs, activities, and acquisitions referred to above shall be formulated to protect and maintain, consistent with the provisions of this Agreement, the Kodiak Brown Bear and the physical, hydrological, and biological integrity of the Kodiak Brown bear habitat.
- (b) Programs, activities and land acquisitions created and financed by the Trust Account shall be considered separate trust duties which are in addition to the duties imposed by the terms of the license issued by the Federal Energy Regulatory Commission and assigned to the Authority.
- administered by four Trustees. One Trustee shall be designated by the Authority. One Trustee shall be designated by the Governor of the State of Alaska. One Trustee shall be designated by the Alaska Regional Director of the United States Fish and Wildlife Service unless otherwise prohibited by law. One Trustee shall be designated by agreement of at least two of the following organizations: the National Audubon Society; the National Wildlife Federation; and the Sierra Club Legal Defense Fund, Inc.
- IV. TERM OF OFFICE OF TRUSTEES. A Trustee under this Agreement serves at the pleasure of the person or organization

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authorized to designate the Trustee and may be removed at any time, with or without cause, by the person or organization. The removal of a Trustee under this section is effective at the time indicated by the person or organization or, if no time is indicated, at the time a replacement Trustee is designated and commences his term. A removal may be made under this section in the same manner a designation is made under III of this Agreement.

V. QUORUM. Except as otherwise expressly required by this Agreement, a majority of the designated Trustees is a quorum for the purposes of convening and holding meetings of the Trustees. Agreement amount a majority of the four designated Trustees is necessary to take any action or make any decision authorized or required by this Agreement. However, the Trustees may not take any action unless at least three Trustees have been designated and are presently serving as Trustees. A unanimous decision is required when only three Trustees are present to act.

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VI. SEGREGATION OF TRUST ACCOUNT. The Trustees shall hold the Trust Account at all times as a special fund and separate trust account wholly segregated from other funds and securities. The Trustees may not commingle the Trust Account with other funds or securities. The Trustees may not, individually or collectively, use, loan, or borrow Trust Account assets except as expressly provided in this Agreement.

VII. INITIAL PRINCIPAL OF TRUST ACCOUNT. The initial principal of the Trust Account is Five Hundred Thousand Dollars (\$500,000) conveyed to the Trustees in accordance with I of this Agreement. The initial principal of the Trust Account may not be invaded except that the Trustees may expend for the purpose of the Trust Account Twenty-Five Thousand Dollars (\$25,000) of the initial principal of the Trust Account during the period

commencing with the designation of the third Trustee and ending one year after that designation. Except for the amount expended during that period, the Trustees shall invest the initial principal of the Trust Account in accordance with VIII of this Agreement. The initial principal of the Trust Account shall not be used to invest in bonds sold for the purpose of financing hydroelectric power projects. However, upon unanimous agreement of the designated Trustees, the Trustees may use all or part of the initial principal of the Trust Account to purchase fee simple title to land, a perpetual interest in land, or a perpetual interest in water or the storage of water if, in the Trustees' opinion, the purchase will better advance the purpose of the Trust Account than the annual expenditure of the income which the initial principal of the Trust Account would otherwise have generated.

INVESTMENT OF INITIAL PRINCIPAL OF ACCOUNT. Except as otherwise permitted in VII of this Agreement, the Trustees, in order to generate as high and as steady an annual income as is prudently possible, shall invest the initial principal of the Trust Account in high quality corporate, government, or government agency bonds, including commercial or financial company paper, which are rated in one of the two highest ratings by a nationally recognized rating agency and in time deposits or repurchase agreements with a bank or trust company organized under the laws of a state of the United States or with a national banking association. However, the time deposits or repurchase agreements may not exceed at any one time in the aggregate ten percent of the combined capital and surplus of the bank, trust company, or national banking association, and the bank, trust company, or national banking association must have a combined capital and surplus of at least \$15,000.000.

IX. EXPENDITURE OF INCOME. (a) The Trustees shall annually expend as much of the net income of the Trust Account as they, in their sole discretion, consider advisable for the purposes described in II of this Agreement, on projects and activities for the protection and maintenance of the Kodiak Brown Bear or the Kodiak Brown Bear habitat. In determining the projects, activities, or acquisitions on which to expend income of the Trust Account under this section, the Trustees shall consult with the State of Alaska Department of Fish and Game, the United States Fish and Wildlife Service, and, to the extent the Trustees consider necessary or useful, with other governmental and private conservation agencies concerned with the Kodiak Brown Bear or the Kodiak Brown Bear habitat. The consultations shall be for the purpose of advancing the purposes of the Trust Account and avoiding unnecessary duplication of the programs of other organizations. Projects and activities on which the Trustees may expend income of the Trust Account under this section include, but are not limited to, management of non-federal or non-state owned Kodiak Brown Bear habitat and acquisition of all types of rights in or to land, water, or water storage. Notwithstanding the discretion otherwise conferred upon the Trustees by this paragraph, Trustees shall, through agreements with other agencies or through expenditure of trust revenues

- develop a long term scientific research program designed to collect data on, and monitor, Kodiak Brown Bear habitat and populations. Information obtained from this research shall be applied to mitigate any impacts of the Terror Lake Hydroelectric Project on Kodiak Brown Bear habitat and to carry out the purposes of this trust;
- 2) institute the research program under the supervision of a technical steering committee comprised of qualified ecologists, wildlife

biologists, and mammalogists selected by the Trustees; and

- 3) prepare periodic reports outlining the progress of the research program and make them available to the public in accordance with section XV of this Agreement.
- In this section, "net income" means income after payment of the expenses of administering the Trust Account. The expenses include reasonable fiduciary, investment, management, custodial, and auditing fees and other similar fees. Trustees shall treat the following as principal and shall invest it in accordance with VIII of this Agreement: gains and losses from the sale, exchange, redemption, or other disposition of investments: stock dividends, stock splits, or similar distributions; capital gain dividends of regulated investment companies (mutual funds); liquidating distributions; and any other amounts which, were the Trust Account a taxable entity, would be excluded from taxable income under the Internal Revenue Code (other than interest described in Section 103(a) of the Internal Revenue Code), as amended, or which would be subject to the deduction for "net capital gain" under Section 1202 of the Internal Revenue Code, as amended.
- X. ADDITIONS TO TRUST. The Trustees may accept property for the Trust Account whether real, personal, or mixed by way of gift, bequest, or devise from a person, firm, trust, corporation, or other organization to be held, administered and disposed of in accordance with this Agreement. However, the Trustees may not accept the property if the Trustees determine that it is conditioned or limited in a manner which jeopardizes the Federal income tax exemption of the Trust Account under Section 501(c)(3) of the Internal Revenue Code, as amended, or the Trust Account's status as other than a private foundation under Section 509(a)(3) of the Internal Revenue Code, as amended.

The Trustees shall treat property accepted under this section as additional principal of the Trust Account.

- XI. LIMITATIONS ON USE OF TRUST ACCOUNT. (a) The Trustees may distribute principal, and the income derived from it, if the Trust Account derived it from a corporation under X of this Agreement, only within the United States or its possessions. The Trustees may not allow all or part of the net earnings of the Trust Account to inure or be payable to or for the benefit of a private shareholder or individual, except that the Trustees may pay reasonable compensation for services rendered to the Trust Account and may make payments and distributions in accordance with IX of this Agreement.
  - (b) The Trustees may not use the Trust Account or allow the Trust Account to be used to
    - carry on an activity not permitted to be carried on by a trust exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code, as amended; or
    - 2) carry on an activity not permitted to be carried on by a trust the contributions to which are deductible under section 170(c)(2) of the Internal Revenue Code, as amended.
  - XII. GENERAL POWERS OF TRUSTEES. In addition to other statutory and common law powers, as well as the powers granted in this Agreement, the Trustees may
  - (1) invest and reinvest additional principal, and the income from it, as provided in VIII of this Agreement;
  - (2) sell, lease, or exchange personal, mixed, or real property, at public auction or by private contract, for the consideration and on the terms the Trustees consider advisable regardless of whether the lease or contract may extend beyond the duration of this Agreement;

- (3) make contracts and enter into other undertakings relating to the Trust Account as the Trustees consider necessary or appropriate for the exercise of their powers or performance of their duties under this Agreement;
- (4) borrow money for the periods, at the rates of interest, and upon the terms the Trustees consider advisable, and, as security for the loans, mortgage or pledge real, mixed, or personal property with or without power of sale;
- (5) acquire or hold real, mixed, or personal property, subject to a mortgage or pledge on or of property acquired or held by the Trust Account;
- (6) execute and deliver deeds, assignments, transfers, mortgages, pledges, leases, covenants, contracts, promissory notes, releases, and other instruments, sealed or unsealed, incident to the exercise of their powers or the performance of their duties;
- (7) vote and give proxies as holders of securities of a concern and participate in the reorganization, merger, or consolidation of a concern and in the sale, lease, disposition, or distribution of its assets;
- (8) join with other security holders of a concern in acting through a committee, depositary, voting trustees, or otherwise, and in this connection, delegate authority to the committee, depositary, or voting trustees and deposit securities with them or transfer securities to them:
- (9) pay assessments on securities or exercise subscription rights in respect of securities;
- (10) employ a bank or trust company as custodian of funds or securities and delegate to it the powers the Trustees consider appropriate;
- (11) hold trust property without indication of fiduciary capacity but only in the name of a registered nominee and only if the trust property is at all times identified as such on the books of the Trust Account;

- (12) keep all or part of the trust property described in (k) of this section or other funds in any place or places in the United States of America;
- (13) employ clerks, accountants, investment counsel, investment agents, and any special services and pay the reasonable compensation and expenses of the services in addition to the compensation of the Trustees.

XIII. CREATION OF CORPORATION. The Trustees may form a nonprofit corporation under the laws of the State of Alaska. The corporation, when formed, shall have the power to administer and control the affairs and property of the Trust Account and to carry out the purposes of this Agreement. The Trustees may convey to the corporation the assets and liabilities of the Trust Account. The charter, bylaws, and other provisions for the organization and management of the corporation and its affairs and property shall be, in the determination of the Trustees, consistent with this Agreement. The charter of the corporation must provide that the Trustees, as designated in accordance with III of this Agreement, shall be the board of directors of the corporation.

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ANNUAL REPORTS. The Trustees shall prepare an annual report summarizing the investments and expenditures of the Trust Account during the preceding 12-month period. The report shall include a statement prepared by an independent certified public accountant concerning the Trust Account. The Trustees shall prepare the report no later than January 30 and shall distribute the report to the Governor of the State of Alaska, the Authority, the Alaska Regional Director of the United States Fish and Wildlife Service, the National Audubon Society, the National Wildlife Federation, and the Sierra Club Legal Defense Fund, Inc. In addition, the Trustees shall make copies of the report

available to the public upon request. The Trustees shall charge a reasonable copying fee for the copies.

Trustees shall make available to members of the public, at a reasonable copying charge, all studies and reports financed in whole or in part by the Trust Account. The Trustees shall include in a contract or other agreement for the preparation of a study or report financed in whole or in part by the Trust Account a provision stating that the study or, report is public property and will be made available to members of the public in accordance with this section. The Trustees shall also take additional measures as they consider necessary or appropriate to assure that the study or report is available for distribution to the public upon its completion.

XVI. RELIANCE ON THIS AGREEMENT. A person may rely on a copy, certified by a notary public, of the executed original of this Agreement held by the Trustees and of the notations on it and writings attached to it as fully as he might rely on the original documents themselves. A person may rely fully on statements of fact certified by anyone who appears from the original documents or from the certified copy to be a Trustee under this Agreement. No one dealing with the Trustees need inquire concerning the validity of anything the Trustees purport to do. No one dealing with the Trustees need see to the application of anything paid or transferred to or upon the order of the Trustees.

XVII. TRUSTEES' BOND AND LIABILITY. A Trustee under this Agreement is not required to furnish a bond or surety. A Trustee under this Agreement is not responsible or liable for the acts or omissions of another Trustee or of a custodian, agent, depositary, or counsel selected with reasonable care.

XIX. DISSOLUTION OF TRUST ACCOUNT. In the event of the dissolution or final liquidation of the Trust Account, none of the property of the Trust Account nor the proceeds of the Trust Account may be distributed to or divided among any of the Trustees or officers of the Trust Account or inure to the benefit of an individual. After the liabilities and obligations of the Trust Account have been paid, satisfied, and discharged, or after adequate provision has been made for that purpose, all remaining property and assets of the Trust Account shall be distributed to one or more organizations which shall comply with all of the following conditions:

- the organization shall be organized and operated exclusively for charitable purposes with one of its principal objectives being the preservation of the environment;
- (2) transfers of property to the organization shall, to the extent then permitted under the statutes of the United States, be exempt from Federal gift, succession, inheritance, estate or death taxes (by whatever name called);

- (3) the organization shall be exempt from Federal income taxation by reason of Section 501(c)(3) of the Internal Revenue Code, as amended; and
- (4) contributions to the organization shall be deductible by reason of Section 170(c)(2) of the Internal Revenue Code, as amended.
- XX. SUBSTITUTION OF SUPPORTED ORGANIZATION. In the event that any of the parties to this Agreement shall dissolve or become an organization not described in Sections 170(b)(1)(A) and 509(a)(1) or (2) of the Internal Revenue Code, as amended, the Trustees shall designate a substitute organization for the purposes of II of this Agreement. The designated substitute shall meet the requirements of XIX (1)-(4) of this Agreement and shall be described in Section 509(a)(1) or (2) of the Internal Revenue Code, as amended.
- XXI. DURATION OF AGREEMENT. This Agreement and the Trust Account shall continue in perpetuity.
- XXII. AGREEMENT OF SIGNATORIES. The undersigned signatories to this Agreement agree that this Agreement satisfies the purposes as expressed in II of this Agreement.

XXIII. CONSTRUCTION. This Agreement shall be governed by the laws of the State of Alaska and the provisions of the Internal Revenue Code, as amended.

dated: 1/31/85

ALASKA FOWER AUTHORITY

- 13 -STATE OF ALASKA UNITED STATES FISH AND WILDLIFE SERVICE 10/4/84 DATED: NATIONAL AUDUBON SOCIETY NATIONAL WILDLIFE FEDERATION SIERRA CLUB LEGAL DEFENSE FUND, INC.

Appendix IV

POTENTIAL CONSERVATION PARTNERS

FOR KODIAK BROWN BEARS

#### POTENTIAL CONSERVATION PARTNERS

#### FOR KODIAK BROWN BEARS

Provided below is a list of government agencies, national and state conservation organizations, and other private organizations which have responsibility for or a stated interest in the conservation of wildlife resources in Alaska. Conservation partnerships (e.g., coalitions for reaquiring habitat) could be established with the listed organizations for the purposes of developing and implementing long-term protection strategies for brown bears and their habitats in the Kodiak Archipelago. (Note: this is not intended to be a complete list of all potential conservation partners.)

#### AGENCIES

Alaska Department of Fish and Game, P.O. Box 3-2000, Juneau, AK 99802 (907,465-4100). This state agency is responsible for the conservation and management of fish and wildlife populations for human uses based on sustained yield principles. Management programs are in place for game populations (including Kodiak brown bears), commercial fisheries, sport fisheries, fishery enhancement projects, and a statewide system of refuges, critical habitats, and sanctuaries. The agency also works on habitat-related issues with development interests to mitigate potential adverse impacts of proposed projects on fish and wildlife resources.

Alaska Department of Natural Resources, 400 Willoughby, Juneau, AK 99801 (907, 465-2400). This agency is the primary land manager for state lands which total over 104 million acres in Alaska. It is responsible for administering the state park system, oil/gas leasing, mineral development, grazing leases, and forest management on state lands. It also operates a land disposal program for transferring state lands into private ownership.

U.S. Fish and Wildlife Service (USFWS), Regional Office, 1011 E. Tudor Rd., Anchorage, AK 99503 (907, 786-3542). There are 16 national wildlife refuges in Alaska which total about 77 million acres. Over 23 million acres of private inholdings occur within the refuges and are owned largely by Native corporations and individual Native allotees. The USFWS is responsible for administering the 1.8 million acre Kodiak National Wildlife Refuge which provides some of the best habitat for brown bears of anywhere in the world.

Kodiak Island Borough, 710 Mill Bay Road, Kodiak, AK 99615 (907, 486-9311). This organized borough functions as the local unit of government for the Kodiak Archipelago and has mandatory powers for taxation, education and planning, and platting and zoning. In addition, the borough has land entitlements totaling approximately 70,000 acres.

#### NATIONAL CONSERVATION ORGANIZATIONS

American Conservation Association, Inc., 30 Rockefeller Plaza, Rm 5402, New York, NY 10112 (212, 649-5600). A nonprofit organization which advances conservation education and the preservation and development of natural resources for public use.

American Wildlands Alliance, 7500 E. Arapahoe Rd., Suite 355, Englewood, CO 80112 (303, 771-0380). A nonprofit conservation organization which promotes the protection and wise use of the nation's wilderness areas, wild rivers, wetlands, and associated fish and wildlife resources.

Boone and Crockett Club, 241 S. Fraley Blvd., Dumfries, VA 22026 (703, 221-1888). A nonprofit organization that works for the conservation of North America's wildlife.

Conservation Foundation, The, 1250 24th St., NW, Washington, DC 20037 (202, 293-4800). A nonprofit research and public education organization which promotes the wise use of the earth's resources. Provides technical assistance on land use and other environmental issues. Affiliated with the World Wildlife Fund.

Conservation Fund, The, 1800 North Kent St., Suite 1120, Arlington, VA 22209 (703, 525-6300). A national nonprofit organization dedicated to advancing land and water conservation. Establishes conservation partnerships with other nonprofit organizations, public agencies, and private entities. Provides specialized services ranging from land planning and acquisitions to ecological assessments and conservation education efforts.

Defenders of Wildlife, 1244 19th St., NW, Washington, DC 20036 (202, 659-9510). A national nonprofit organization which works to protect and preserve the natural abundance and diversity of wildlife resources and ecosystems.

Environmental Defense Fund, Inc., Hdqs., 257 Park Avenue South, New York, NY 10010 (212, 505-2100). A nationwide conservation organization which deals with global environmental issues including the protection of fish and wildlife.

Friends Of The Earth\*, 218 D St., SE, Washington, DC 20003 (202, 544-2600). An international organization which focuses on global environmental issues, destruction of pristine habitats, and environmental pollutants.

Game Conservation International, P.O. Box 17444, San Antonio, TX 78217 (512, 824-7509). A nonprofit hunter conservation organization which supports various wildlife conservation projects relating to habitat protection, outdoor education, and antipoaching programs.

\* Has an established office or chapter in Alaska.

International Association Of Fish And Wildlife Agencies, 444 North Capitol St., NW, Suite 534, Washington, DC 20001 (202, 624-7890). An association of state, provincial, and territorial fish and wildlife administrators in North America which promote the conservation, protection, and management of wildlife and associated natural resources.

Land Trust Alliance, The, 900 17th St., NW, Suite 410, Washington, DC 20006 (202, 785-1410). An organization which advances public policies to promote better land conservation at the local and regional levels.

National Audubon Society\*, 950 Third Ave., New York, NY 10022 (212, 832-3200). A conservation organization with chapters throughout North America which deal with numerous environmental issues to include the protection of air, land, and water resources.

National Fish And Wildlife Foundation, Main Interior Bldg., 18th and C Sts., NW, Rm. 2556, Washington, DC 20240 (202, 343-1040). A private nonprofit organization created by the U.S. Congress to administer private sector contributions to programs under the jurisdiction of the USFWS. Also promotes public and private partnerships to benefit the conservation and management of the nation's fish and wildlife resources.

National Wildlife Federation\*, 1400 16th St., NW, Washington, DC 20036-2266 (202, 797-6800). A nonprofit conservation oganization which promotes the protection and wise use of renewable resources, administers a comprehensive conservation education program, and advances environmental safeguards in national and international affairs. Works with other organizations to protect and maintain important fish and wildlife habitats (e.g., high quality wetlands).

National Wildlife Refuge Association\*, 10824 Fox Hunt Ln., Potomac, MD 20854 (301, 983-1238). A nonprofit organization which is dedicated to protecting the integrity of the national wildlife refuge system administered by the USFWS.

Natural Resources Defense Council, Inc., 40 West 20th St., New York, NY 10011 (212, 727-2700). A nonprofit organization dedicated to the protection of endangered natural resources and improving environmental quality.

Nature Conservancy, The\*, 1815 North Lynn St., Arlington, VA 22209 (703, 841-1283). A national nonprofit organization which is committed to preserving biological diversity by protecting natural land and water resources. Works with other private and public organizations through cooperative partnerships and other means to protect critical fish and wildlife habitats.

\* Has an established office or chapter in Alaska.

Rocky Mountain Elk Foundation, P.O. Box 8249, Missoula, MT 59807-8249 (406, 721-0010). A nonprofit wildlife conservation organization which is dedicated to the conservation and management of elk, other wildlife, and their habitats.

Safari Club International\*, 4800 West Gates Pass Rd., Tucson, AZ 85745 (602, 620-1220). A nonprofit sportsmen's conservation organization which promotes the conservation of wildlife throughout the world and the values of hunting as one of many management tools. Sponsors various conservation education programs and wildlife research projects.

Sierra Club\*, 730 Polk St., San Francisco, CA 94109 (415, 776-2211). A national nonprofit organization which promotes the protection of wildlands, restoration of natural ecosystems, and responsible use of natural resources.

Trust For Public Land, The, 116 New Montgomery St., 4th Fl., San Francisco, CA 94105 (415, 495-4014). A national, nonprofit land conservation organization which works with other private nonprofits and government agencies to acquire high quality lands for public use.

**Wilderness Society, The\***, 900 17th St., NW, Washington, DC 20006-2596 (202, 833-2300). A nonprofit organization dedicated to the preservation of wilderness areas and wildlife resources. Works to increase public appreciation of wilderness and fosters an improved American land use ethic.

Wildlife Management Institute, Suite 725, 1101 14th St., NW, Washington, DC 20005 (202, 371-1808). A national nonprofit organization which promotes professional management of natural resources for the benefit of the resources as well as people.

Wildlife Society, The\*, 5410 Grosvenor Ln., Bethesda, MD 20814 (301, 897-9770). An international organization of professionals and students engaged in wildlife conservation, management, and research programs. Supports sound stewardship of wildlife resources and their habitats.

World Wildlife Fund-US, 1250 24th St., NW, Washington, DC 20037 (202, 293-4800). A large private organization which works worldwide to protect endangered species and wildlands. Is a strong advocate for conservation of the earth's land and water resources, promotes ecologically sound developments, monitors the international trade in wildlife, and supports scientific investigations.

\* Has an established office or chapter in Alaska.

#### ALASKA CONSERVATION ORGANIZATIONS

Alaska Center for the Environment, 519 W. 8th Ave., #201, Anchorage, AK 99501 (907, 274-3621). The largest environmental organization in southcentral Alaska. Works on land-use planning, timber harvests, wetlands protection, and disposal of hazardous and toxic wastes.

Alaska Conservation Foundation, 430 W. 7th Ave., Suite 215, Anchorage, AK 99501 (907, 276-1917). An environmental fund raising and fund granting organization which provides financial assistance to qualifying Alaska environmental groups. Promotes improved communication and cooperation among environmental organizations.

Alaska Friends of the Earth, 326 W. 11th Ave., Anchorage, AK 99501 (907, 653-7792). The state branch of the national group Friends of the Earth. Focuses on maintaining Native cultures, environmental health, and protection of the international Porcupine Caribou Herd and marine mammals.

Alaska Lands Act Coordinating Committee, P.O. Box 202045, Anchorage, AK (907, 258-9154). A coordinating group which represents national and grassroots conservation organizations that deal with the implementation of ANILCA.

Alaska Natural Heritage Program, 707 "A" Street, Anchorage, AK 99501 (907, 279-4549). The "science arm" of The Nature Conservancy in Alaska. Identifies unique and ecologically significant lands so that adequate protection measures can be applied consistently.

Coastal Coalition, P.O. Box 2424, Cordova, AK 99574 (907, 424-5509). An organization formed as a result of the Exxon Valdez oil spill in Prince William Sound. It focuses on the settlement of natural resource damages from the spill and prevention of similar impacts. Promotes the purchase of timber rights on Native lands with high wildlife values.

National Audubon Society, 308 "G" Street, Suite 217, Anchorage, AK 99501 (907, 276-7034). A statewide organization with a regional office in Anchorage. Operates under the general policies of its national parent organization. Is highly active in conservation issues including the protection of critical fish and wildlife habitats.

National Wildlife Federation, Alaska Natural Resources Center, 750 W. 2nd Ave., #200, Anchorage, AK 99501 (907, 258-4800). A statewide conservation organization which maintains a regional office in Anchorage. Operates under the same general policies as its national parent organization. Is heavily involved in land and water conservation issues and promotes statewide wildlife education programs.

National Wildlife Refuge Association, Alaska Chapter, 13641 Jarvi Drive, Anchorage, AK 99515 (907, 345-3096). This association is concerned with the preservation and maintenance of the National Wildlife Refuge System in Alaska.

Nature Conservancy of Alaska, The, 601 W. 5th Ave., Suite 550, Anchorage, AK 99501 (907, 276-3133). The state chapter of its parent conservation organization with a fully staffed regional office in Anchorage. Focuses on land and water conservation needs, including the identification, protection, and stewardship of high quality fish and wildlife habitats.

Sierra Club, Alaska Field Office, 241 E. 5th Ave., #205, Anchorage, AK 99501 (907, 276-4048). A statewide environmental organization which maintains a permanent field office in Anchorage. Operates under the same general policies as its national parent organization. Focuses on monitoring the implementation of ANILCA and issues affecting CSU's.

Wilderness Society, The, 430 W. 7th Ave., Suite 210, Anchorage, AK 99501 (907, 272-9453). A statewide organization with a regional office in Anchorage. Focuses on the preservation of wilderness areas, environmentally sound management of federal CSU's, and implementation of ANILCA.

Wildlife Federation of Alaska, 750 W. 2nd Ave., #200, Anchorage, AK 99501 (907, 272-5200). This organization is the Alaska affiliate of the National Wildlife Federation. It is dedicated to the conservation of Alaska's fish and wildlife resources and their habitats.

#### OTHER ORGANIZATIONS

Alaska Professional Hunters Association, Inc., P.O. Box 91932, Anchorage, AK 99509 (907, 522-3221). This is an association of big game hunting guides who support sound wildlife conservation programs including habitat protection.

Koniag, Inc., 4300 "B" Street, Suite 407, Anchorage, AK 99503 (907, 561-2668). This is the Native regional corporation for the Kodiak Archipelago.

Trustees for Alaska, 725 Christensen Drive, Suite 4, Anchorage, Ak 99501 (907, 276-4244). A public interest law firm which is concerned with environmental protection and litigates various land and water conservation issues.

## COVER WORK TEET FOR 1993 IDEA SUBMISSOS

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	Category  Mg ut Ac + 184
	Lead Agency USFS
	Cooperating Agency(ies)
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	type: enlowment
RANKING	H M L Rank Within Categories .
	H M L Rank Overall
	Project Number - if assigned

itification: This project will assist the people of Prince Will Sounding the affected communities (Chenega, Tatilik, Whittier, Cordova)

Description: The Chugach National Forest Foundation would be an ent. nonprofit organization providing financial assistance to munities and individual through:

- (1) Granting college scholarships to individuals for natural resources education.
- (2) Hire several individuals who will work for the Chugach National Forest in natural resource positions.
- (3) Provide grants to communities for specific projects to restore opportunities lost or damaged in the oil spill such as recreation sites or subsistence resources.

primary charter of the Chugach National Forest Foundation will be to mote and financially assist individuals and communities in resource agement in Prince William Sound.

ject Duration: This project will last forever.

imated Cost Per Year: The foundation will need to be funded with an owment in its first year. The funds will be managed to annually fund the ndations programs and grants. Estimated initial cost: \$5 million.

er mments: The foundation will be run by an executive director which will responsible to a board of directors made up of one individual from each munity, the Chugach National Forest supervisor, the District Rangers for cier and Cordova districts.

Bruce UAN Zec 201 East 9th Inchorage Alaska 99501

steve Hennig

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### PROPOSAL FOR OIL SPILL RESTORATION PROJECT

Title of Project: Endowment for Outdoor Recreation Management

**Justification:** Outdoor recreation in Prince William Sound was severely impacted by the oil spill, not only in the directly affected areas, but in outlying areas as well. This is due to displacement from the worst affected areas, and new use patterns that have developed in marginally affected and unaffected areas stemming from cleanup activities themselves.

Several state marine parks in Prince William Sound, Resurrection Bay, the outer Kenai coast and the Kodiak area are potential sites for basic recreation facilities, like latrines, mooring buoys, tent platforms, and public use cabins. Prior to the spill and continuing to the present, the state provided little or no facilities or management presence in the marine parks. Facilities and services at these marine parks would compensate for lost opportunities in directly and indirectly affected areas.

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

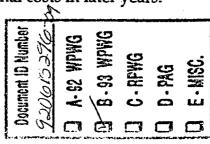
**Description of Project:** Alaska State Parks/DNR proposes an endowment to provide a perpetual source of funds for outdoor recreation facilities and services in the spill affected area.

Using 5% of the \$90 million available for allocation (or \$4.5 million), a conservative estimate of the endowment's earnings is approximately \$270,000 annually. After inflation proofing the corpus, around \$135,000 would be available to support recreation programs. Management and administrative details are not resolved at this time. However, one option is to contract with the Alaska Permanent Fund Corporation to manage the fund according to guidelines developed by the trustee council or a separate board of directors.

Proceeds from the fund would be used for facility development and field management of the 16 state marine parks in Prince William Sound. These marine parks are currently the subject of a management and development planning project, which is scheduled for completion in late 1992. The plan will provide overall policy direction for all marine parks, and will address such issues as public and private access, commercial uses, continuing oil spill restoration and monitoring, compatible and incompatible activities, and the appropriate level of facility development. Earnings from the endowment would be available to support the plan's implementation.

Estimated Duration of Project: Perpetual.

Estimated Cost Per Year: \$4.5 million in 1993. No additional costs in later years.



Other Comments: This proposal is modeled after Governor Hickel's plan for an oil spill endowment.

Name, Address, Telephone:

Neil Johannsen or David Stephens Alaska State Parks

Box 107001

Anchorage, AK 99510

907-762-2602

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Title of Project: Non-Profit Foundation for Prince Wi am Sound

Justification:

The oil spill sparked great interest in the Sound and its resources, as well as concern for the future of those resources. This project would provide a means to harness that concern for the long-term benefit of the Sound, the recovery of its resources, and people's appreciation of the area.

Description of Project:

GOAL: To foster the creation of a non-profit foundation which will support education, interpretation, research, and sustainable tourism in PWS.

PROJECT: Non-profit organizations supporting natural resource purposes exist throughout the nation, including interpretive associations, the National Forest Foundation, various "Friends" organizations, Tread Lightly!, Inc., and so on. These organizations provide a means by which private citizens and the private sector can express support for various natural resource programs in which they have a strong interest. This proposed project will provide such a vehicle for private interest support for Prince William Sound and its ongoing recovery.

This project will have three phases: feasibility study and establishment of a steering committee; the legal incorporation of the non-profit foundation and establishment of its endowment; and the self-sustaining operation of the foundation.

Estimated Duration of Project: Two years to establish the foundation.

Estimated Cost per Year: Year 1 - \$70,000; Year 2 - \$1,000,000 endowment

Name, Address, Telephone:

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

Technical contact:

Susan Rutherford, Staff Officer (907)271-2534

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

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