

**Misc. News  
Clippings**

B-2 Friday, March 23, 2001

## NOAA plan seeks oil spill remnants

■ **VALDEZ:** Crews to sample beaches for 12-year-old crude.

The Associated Press

VALDEZ — The National Oceanic and Atmospheric Administration plans to sample beaches around Prince William Sound this summer looking for oil remaining from the March 1989 Exxon Valdez oil spill.

"No one expected the oil to persist over the years, but it has," said researcher Jeep Rice of NOAA's Auke Bay Lab.

The project is being done at the request of the Exxon Valdez Oil Spill Trustee Council to see if the oil has persisted and whether subsistence and sporting areas are affected.

The Valdez Vanguard reports NOAA representatives presented their beach survey plans at meetings last week in Valdez, Cordova, Chenega Bay and Tatitlek.

Ninety-two sites around Prince William Sound have been chosen at random, including sites on Knight Island, Perry Island and Chenega Island.

The agency is also taking suggestions from Prince William Sound residents for areas that should be sampled.

"This should cover 20 to 25 percent of the heavily- to

moderately-oiled areas," Rice said. "Because they're selected at random, we can use this information to extrapolate for the rest of the Sound."

There has been no concerted effort to look for oil since 1993. Some oil remained in the area in 1999, the 10th anniversary of the spill.

"How significant that is is debatable," Rice said. "But it demonstrated the need for another assessment. We don't know how much remains, and this project can answer that question."

Rice said long-term effects of the spill continue to appear.

"It affects the pink salmon egg mortalities, and sea ducks and juvenile otters show signs of being affected, too. The (Sound) is still suffering the effects," he said.

Small holes will be dug at each site in a grid pattern. When the workers find oil, more holes will be dug to map out the contaminated sites.



# *Kodiak Island Borough*

*Office of the Borough Clerk*

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February 9, 2001

Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, AK 99501

RECEIVED

FEB 12 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Dear Sir/Madame:

Enclosed please find a copy of the Kodiak Island Mayors Conference Resolution No. 2001-12 requesting the establishment of an ecosystem research foundation with the restoration reserve.

If you have any questions, please feel free to contact our office.

OFFICE OF THE BOROUGH CLERK

Patti Kirkpatrick  
Deputy Borough Clerk

Enclosures

**KODIAK ISLAND MAYORS CONFERENCE**

**RESOLUTION NO. 2001-12**

**A RESOLUTION URGING THE EXXON-VALDEZ OIL SPILL TRUSTEE  
COUNCIL TO ESTABLISH AN ECOSYSTEM RESEARCH FOUNDATION  
WITH THE RESTORATION RESERVE**

**WHEREAS**, the Exxon-Valdez Oil Spill Trustee Council has been setting aside \$12 million per year into a Restoration Reserve Fund; and

**WHEREAS**, this fund is projected to have approximately \$150 million by the year 2002; and

**WHEREAS**, the support for establishing this fund was heavily represented by people who supported continued long-term research into the impact on ecosystems in and adjacent to the spill area; and

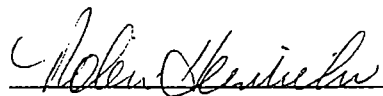
**WHEREAS**, there is a growing need for research on the ecosystems in and adjacent to the spill area to better understand these systems and the marine mammals, fish, sea birds, and other inhabitants of these ecosystems; and

**WHEREAS**, the Exxon-Valdez Oil Spill Trustee Council is seeking public input for recommendations concerning the use of the Restoration Reserve; and

**WHEREAS**, much of the spill area and adjacent area is in Southwest Alaska and Kodiak Island Borough.

**NOW, THEREFORE, BE IT RESOLVED BY THE KODIAK ISLAND MAYORS CONFERENCE** that the Exxon-Valdez Oil Spill Trustee Council is urged to establish a non-profit ecosystem research foundation with an Alaskan board of directors to review proposals and award grants for ecosystem research using the annual interest earnings after inflation proofing of the fund.

**PASSED AND APPROVED** on this 26th day of January, 2001.

  
\_\_\_\_\_  
Robin Heinrichs, Chairman  
Kodiak Island Mayors Conference

Attest:   
\_\_\_\_\_

Date: 1/26/01



# Alaska offers spill aid

■ **GALAPAGOS:** State has cleanup expertise to share, Knowles says.

By S.J. KOMARNITSKY  
Anchorage Daily News

Gov. Tony Knowles has offered Alaska's help in cleaning up a fuel spill threatening the Galapagos Islands.

More than 160,000 gallons of diesel oil have spilled into the waters surrounding the renowned islands since a tanker ran aground last week.

Knowles sent a letter Tuesday to Ecuador's consulate general in San Francisco. The governor noted Alaska's experience in cleaning up a disastrous spill in a delicate environment, gained after the grounding of the Exxon Valdez in 1989, and said, "I understand the problems and challenges that you face."

State environmental officials said the state could offer technical expertise in managing the spill response and in cleanup, particularly where the fuel oil has reached shorelines.

"We lived and breathed (the Exxon spill) for four years," said John Bauer, an environmental specialist with the state Department of Environmental Conservation. "Our strengths are in the whole process of how to clean up."

Ecuador's consulate general, Fernando Flores, reached at his office in San Francisco, said he welcomed the offer and will talk to his government about it. He said his country needs supplies as well as technical expertise. It needs skimmers, absorbent pads and chemical dispersants, for example.

"The government is managing in the best way it can," he said.

Ecuador, an impoverished nation of 12 million, has limited resources.

The Galapagos, 600 miles off Ecuador's coast, are considered a worldwide treasure. The

## SPILL: *Alaska may help Ecuador*

*Continued from B-1*  
islands are home to species that exist nowhere else and are famous for their tortoises weighing over 500 pounds.

The Galapagos are widely credited for leading British naturalist Charles Darwin to develop his ideas about evolution and natural selection.

According to news reports, the tanker was carrying 243,000 gallons of diesel fuel. Much of it was to supply cruise ships that ferry tourists around the islands. It ran aground Jan. 16 off

the coast of San Cristobal Island, the easternmost island in the Galapagos archipelago.

Crews pumped 50,000 gallons of fuel off the ship before the cargo hold cracked Friday. Winds have kept much of the fuel offshore, but some has reached one island.

The pictures bring back awful memories of Prince William Sound after the Exxon spill, the DEC's Bauer said. "You don't feel anything but bad about what's happened down there."

■ Reporter S.J. Komarnitsky can be reached at [skomarnitsky@adn.com](mailto:skomarnitsky@adn.com)

# Live cameras make stars of Southeast's Steller sea lions

By KATHY DYE  
Juneau Empire

JUNEAU — Juneau scientist Brendan Kelly doesn't have to leave his office to see wild sea lions, the behemoths come to him.

They do not muscle down his door, but fly through the air as digitized bits, courtesy of two live video cameras set up by the federal government on Benjamin Island, a sea lion haulout 25 miles north of downtown Juneau.

As the mammoth beasts cavort and feast, the images are transmitting live on the Internet and to the University of Alaska. Kelly records the footage on video tape for research.

The new state-of-the-art system could eventually mean scientists will travel less to remote sites to study the animals.

"My first reaction was anxiety I'd hate to replace going out in the field with staring at video monitors," said Kelly, a University of Alaska Fairbanks professor based in Juneau. But

"when we got a good clean signal coming across, it was pretty impressive."

The pilot project is part of a joint effort by the university and the National Marine Fisheries Service, the federal agency that manages Steller sea lions. The animals are considered so imperiled in western Alaska a federal judge in July closed large areas near the sea lions' critical habitat to commercial fishing.

Scientists hope the sea lions here will display behavior on video that ultimately will help answer why populations are dwindling in other parts of the state. Researchers plan to intensively study the footage by counting the animals, identifying them and watching their interactions. Kelly said they may find clues to what ails the western herds by studying the behavior of healthy sea lions and comparing it to populations in decline.

"We suspect the losses to the population (in western Alaska) are happening in the juvenile age classes. They're not making it through wean-

ing," Kelly said.

The project was made possible by U.S. Sen. Ted Stevens, who has steered millions of dollars to government agencies to study the western Alaska sea lions, considered an endangered species. The National Marine Fisheries Service in September hired SeeMore Wildlife, a private company that recently set up critter cameras on an island near Seward to transmit live images to the Alaska SeaLife Center, said Tom Loughlin of the National Marine Mammals Lab, a division of NMFS.

Loughlin said the agency was impressed with the Seward project and paid SeeMore Wildlife about \$60,000 to set up two weatherproof, robotic cameras on Benjamin Island, home to roughly 500 sea lions in winter. The company, based at Homer, owns the images, which it transmits to university researchers for about \$100 a day, Loughlin said. SeeMore Wildlife also posts the footage live on the Internet at [www.seemorewildlife.com](http://www.seemorewildlife.com) and [www.nationalgeographic.com](http://www.nationalgeographic.com).

The advantage of the live video system is, "you can get to these sites continuously and you're not inhibited by weather," Loughlin said. "And you don't have to have people on site year-round to get the data."

The camera batteries are charged by a wind generator and solar panels. The video is transmitted live by microwave to the Juneau campus, said the university's Kelly. He and his students can remotely zoom in, move the cameras from side to side and activate "windshield wipers" on the lenses through a computer keyboard linked to the cameras by radio signals, Kelly said. Using a special code, researchers also can control the equipment from any computer connected to the Internet.

"There is a gold mine of behavior you can study in detail," Kelly said.

The project has raised some technical hurdles for the SeeMore Wildlife team, which faced the challenge of making the system work in a sometimes hostile environment.

In December, the Benjamin Island

cameras suddenly went black. When SeeMore's technical experts arrived, they found the wind generator in pieces.

"The wind tore the blades off of it and these are industrial wind generators. They're rated to 100-120 knots," said Stephen Howell, project manager of SeeMore Wildlife.

Howell said, however, the system is remarkably stable considering the unfriendly environment and the 1,500-pound sea lions "snuggling up" to the equipment.

"We've seen a sea lion with its head resting on the camera," said Howell, laughing.

Loughlin of NMFS said the federal government probably later this year will attach cameras to the animals' heads.

The equipment eventually will fall off the sea lions and researchers will have to retrieve it. Also, the head cams will store only recorded images instead of transmitting video live.

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11.12.04

# **Trustee Council Meeting**

## **April 3, 2001**

**EVOS INVESTMENT FUND**  
**PRELIMINARY SUMMARY OF MARCH 2001 ACTIVITY**

Since reports for March 2001 activity in the EVOS Investment Fund will not be available until the tenth working day of April 2001, this summary information is provided.

Total invested assets as of February 28, 2001	\$132,423,094
Total invested assets as of March 31, 2001	\$127,870,592
Total Investment Income (Loss)	\$ 4,552,502

**Asset Allocation**

	<u>Policy &amp; Band</u>	<u>Current Allocation</u>
Domestic Fixed Income	42% (35% - 49%)	47.83%
Domestic Equities	41% (34% - 48%)	36.07%
International Equities	17% (12% - 22%)	16.02%
Cash		<u>0.07%</u>
Total		99.99%

STATE OF ALASKA  
DEPARTMENT OF REVENUE  
TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund

STATEMENT OF INVESTED ASSETS

February 28, 2001

Investments (at fair value)	<u>2001</u>
Cash and cash equivalents	
Short-term Fixed Income Pool	\$ 93,846
Marketable debt and equity securities	
Broad Market Fixed Income Pool	60,852,550
Non-retirement Domestic Equity Pool	49,329,178
SOA International Equity Pool	<u>22,147,519</u>
Total invested assets	\$ <u>132,423,094</u>

STATE OF ALASKA  
DEPARTMENT OF REVENUE  
TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund

STATEMENT OF INVESTMENT INCOME  
AND CHANGES IN INVESTED ASSETS

For the period ended February 28, 2001

	<u>CURRENT MONTH</u>	<u>YEAR TO DATE</u>
<b>Investment Income</b>		
<b>Cash and cash equivalents</b>		
Short-term Fixed Income Pool	\$ 440	\$ 93,357
<b>Marketable debt and equity securities</b>		
Non-pooled investments	0	61,799
Broad Market Fixed Income Pool	561,326	4,144,550
Non-retirement Domestic Equity Pool	(4,960,569)	(5,670,822)
SOA International Equity Pool	(1,227,289)	(852,481)
Total income from marketable debt and equity securities	(5,626,532)	(2,316,953)
<b>Total investment income (loss)</b>	(5,626,092)	(2,223,596)
<b>Total invested assets, beginning of period</b>	138,049,185	0
<b>Net contributions (withdrawals)</b>	0	134,646,690
<b>Total invested assets, end of period</b>	\$ <u>132,423,094</u>	\$ <u>132,423,094</u>

STATE OF ALASKA  
DEPARTMENT OF REVENUE - TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund  
Asset Allocation Policy (effective 4/24/00) with Actual Investment Holdings as of  
February 28, 2001

	Asset Allocation		Fair value	Current Allocation	Variance
	Policy	Range			
<b>Cash and cash equivalents</b>					
Short-term Fixed Income Pool	0.00%		93,406	0.07%	-0.07%
<b>Total cash and cash equivalents</b>	<b>0.00%</b>		<b>93,406</b>	<b>0.07%</b>	<b>-0.07%</b>
<b>Marketable debt and equity securities</b>					
Broad Market Fixed Income Pool	41.00%	34% - 48%	60,852,550	45.95%	-4.95%
Non-retirement Domestic Equity Pool	42.00%	35% - 49%	49,329,178	37.25%	4.75%
SOA International Equity Pool	17.00%	12% - 22%	22,147,519	16.72%	0.28%
<b>Total marketable debt securities</b>	<b>100.00%</b>		<b>132,329,248</b>	<b>99.93%</b>	<b>0.07%</b>
<b>Total holdings</b>	<b>100.00%</b>		<b>132,422,653</b>	<b>100.00%</b>	<b>0.00%</b>
Short-term Fixed Income Pool Interest Receivable			440		
<b>Total Invested Assets at Fair Value</b>			<b>132,423,094</b>		



# Exxon Valdez Oil Spill Investment Fund

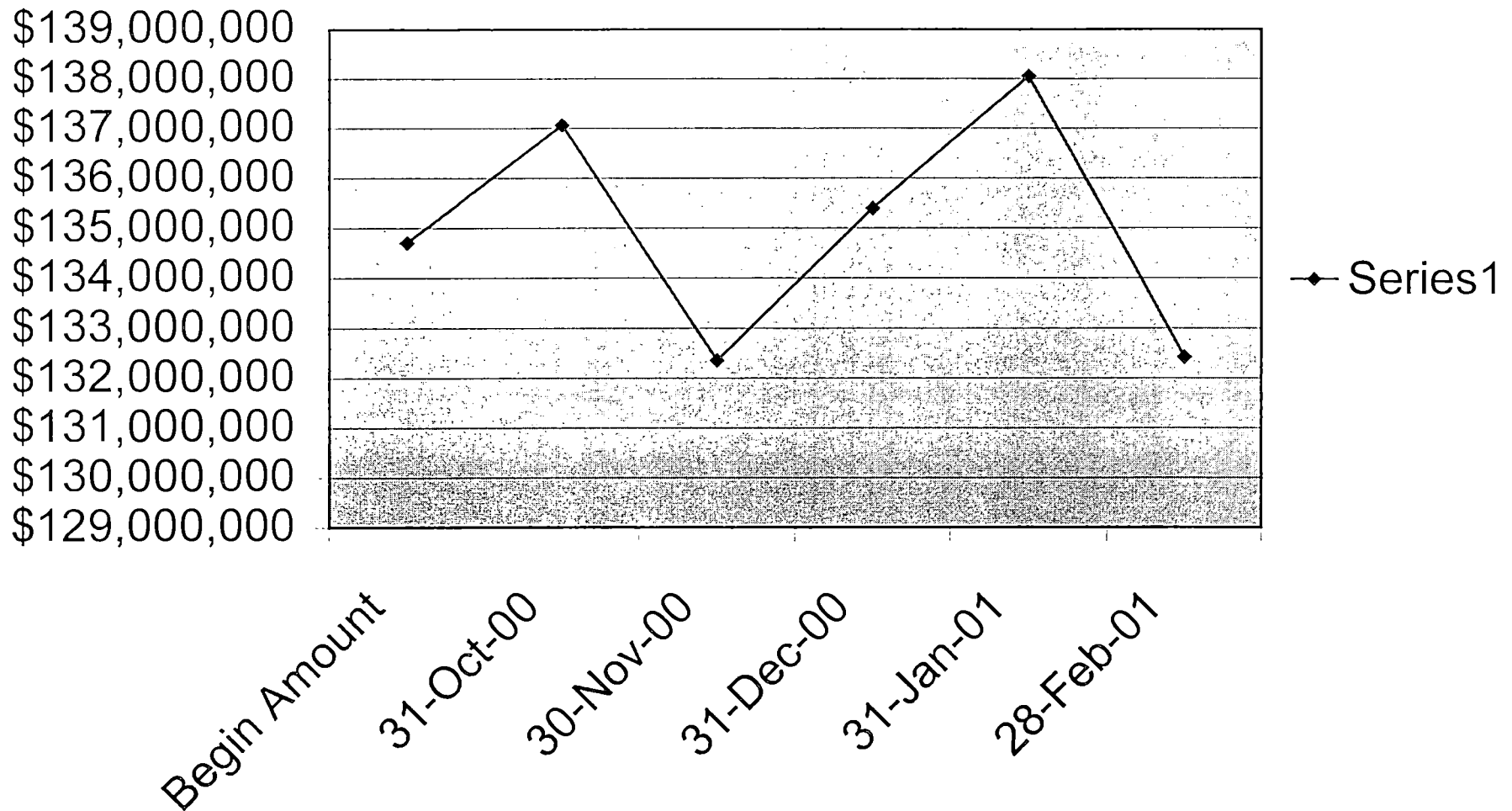
Period Ending February 28, 2001

	<u>Mkt Value (\$M)</u>	<u>Monthly Return</u>	<u>3 Mo. Return</u>	<u>YTD</u>	<u>Fiscal YTD</u>	<u>Inception to Date*</u>
AY02 EVOS Investment Fund	132,423	-4.08	0.05	-2.20	-	-3.45
EVOS Investment Fund Index		-4.66	-0.65	-2.67	-4.83	-4.36
Short-term Fixed Income Pool	94	0.47	1.77	1.09	-	2.34
91 day T-Bill		0.38	1.6	1.04	4.24	2.15
AY73 Broad Market Fixed Income Pool	60,853	0.93	4.79	2.64	-	6.61
Lehman Brothers Aggregate Index		0.87	4.42	2.51	10.06	6.13
Non-Retirement Domestic Equity Pool (Russell 3k)	49,329	-9.14	-4.49	-6.11	-	-13.26
Russell 3000 Index		-9.14	-4.45	-6.03	-13.86	-13.27
AY66 SOA International Equity Pool	22,148	-5.25	-1.74	-5.67	-	-4.13
Morgan Stanley Capital Intl. (EAFE)		-7.5	-4.26	-7.55	-17.28	-7.85

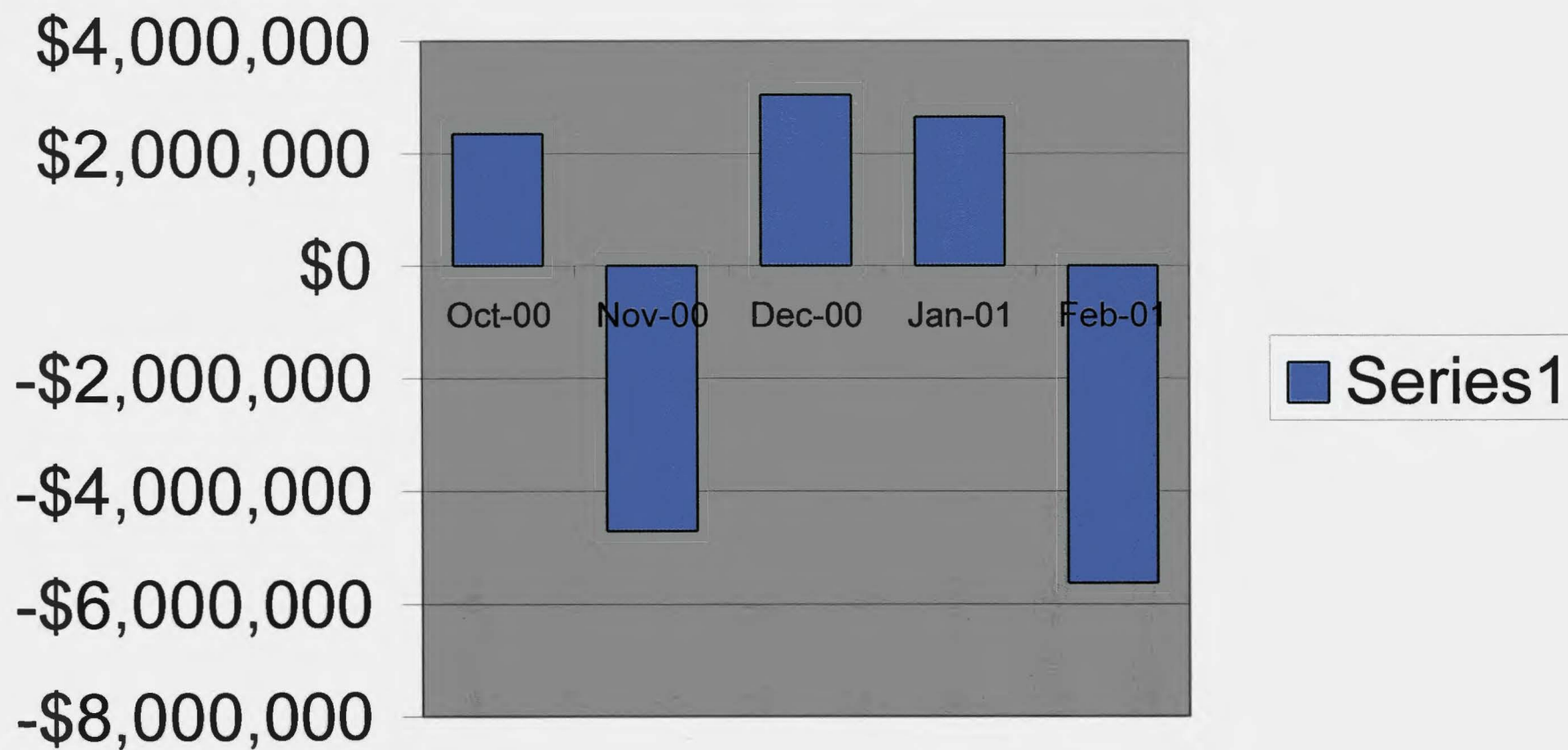
Source: State Street Bank, Insight.

\* October 31, 2000-February 28, 2001

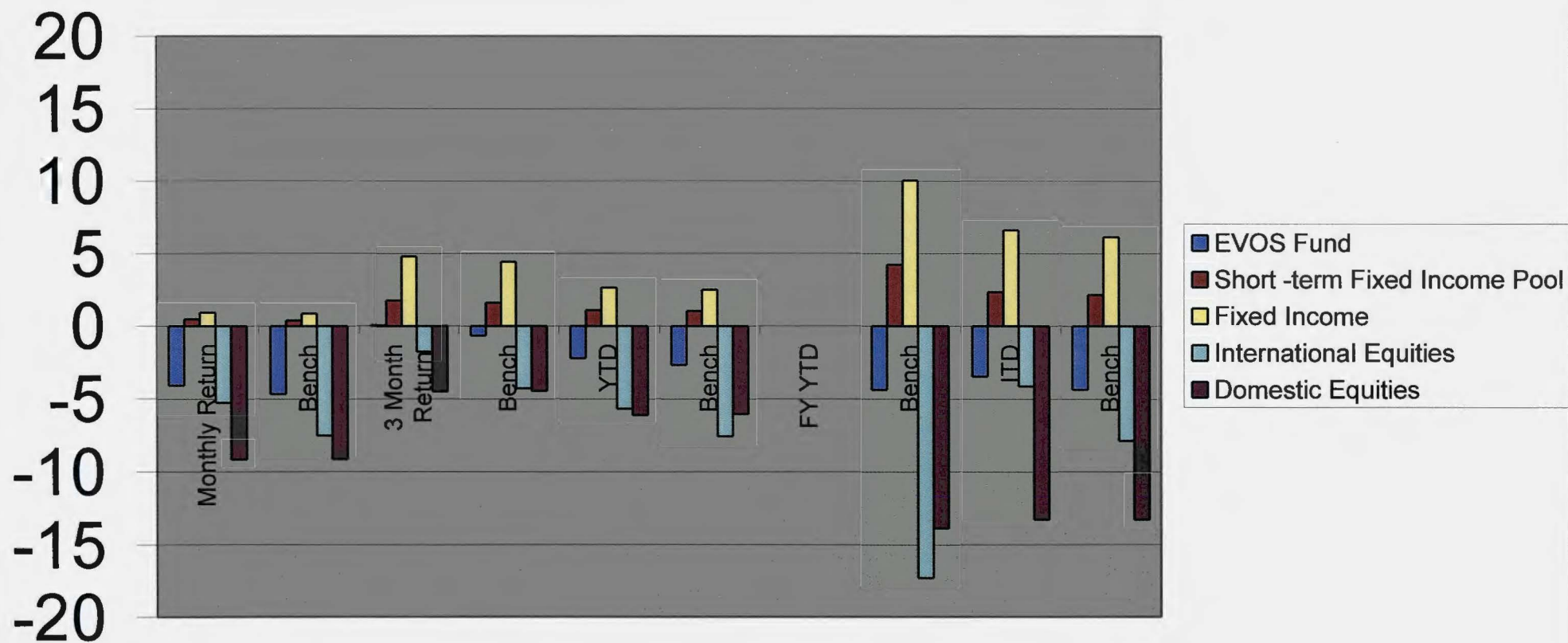
## Investment Fund Assets



# Investment Fund Earnings (Loss)



# February 2001 Performance Measurement



# 1991-2000: It Was a Great Party

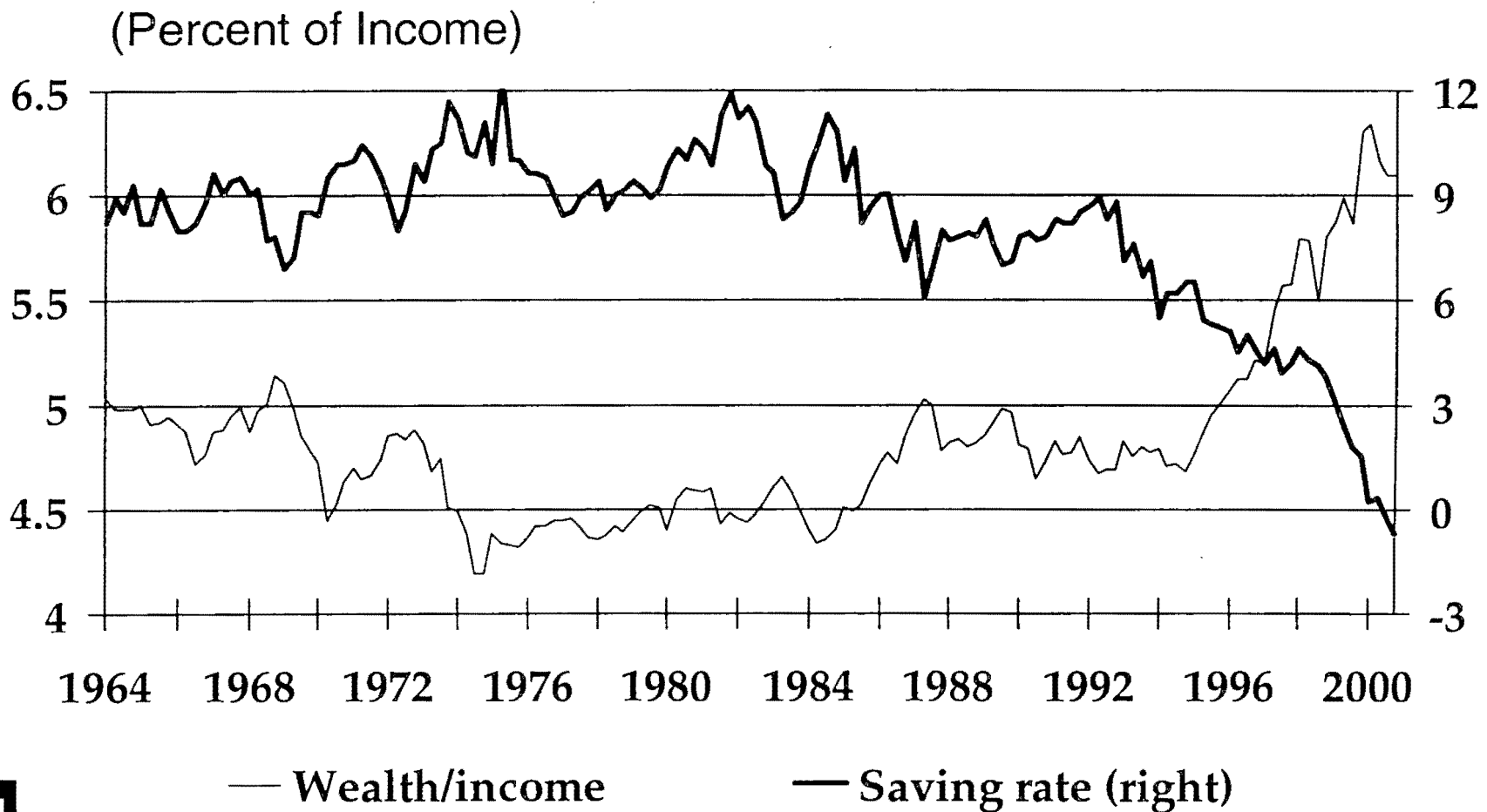
(...at least until last June)

- Unemployment fell from 7.8% to 4.0%.
- Core inflation fell from 5.5% to 2.5%.
- Total return on the S&P 500 averaged 17.5% per year.
- Federal surplus emerged from a *deficit* of \$270 billion to reach \$240 billion (from -4.5% of GDP to +2.4%)
- Real wages per worker rose 1.6% per year, compared with just 0.5% during 1980s.
- The internet arrived (...although it was already here) and the age of the “new economy” dawned.

# The Current Economic Environment

- U.S. economy set a record in March 2000 for the longest expansion in US history, and GDP recorded its largest annual gain since 1984.
- Inflation and unemployment remain at 30-year lows.
- However:
  - ✓ Consumers are scared.
  - ✓ The stock market is down.
  - ✓ The savings rate has fallen from 8% to -1%.
  - ✓ Consumer debt has risen from 76% to 94% of disposable income.
  - ✓ Energy prices are up.
  - ✓ The trade gap is hitting records.
  - ✓ Investment is slipping.
  - ✓ Some manufacturing is already in recession.

# Saving Plunges as Wealth Hits a Record High



# Capital Markets Confront the Law of Gravity

	<u>1999 Returns</u>	<u>2000 Returns</u>
Callan Broad	22.74	-9.79
S&P 500	21.04	-9.10
Callan Small	33.87	0.23
Russell 2000	21.26	-3.02
EAFE	26.96	-14.17
<b>NASDAQ</b>	<b>86.10</b>	<b>-39.18</b>
LB Agg	-0.82	11.63
SB Non-US	-5.07	-2.63



## Callan Utilizes Consensus View

- The U.S. economy has slowed, but will avoid recession.
- The Fed has switched to recession avoidance from inflation-spotting - expected to reverse all 7 rate hikes.
- The dollar has peaked
- Inflation has moved up from its trough.
  - interest rates expected to remain flat or come back down
  - Inflation expected to rise mildly
  - Dollar strength has passed

# Capital Market Projection Process

- Evaluate the current environment and economic outlook for the U.S. and other major industrial countries.
- Examine the relationships between the economy and asset class performance patterns. Inflation, interest rates, consumer sentiment and key components of GDP growth such as productivity are of particular interest.
- Examine recent and long-run trends in asset class performance, and create risk, return and correlation projections by blending descriptive asset class characteristics with capital market insight and economic analyses.
- Test the projections for reasonable results using the optimizer and fine tune the estimates.

# We Still Examine Stock Fundamentals

*(...although we were starting to wonder)*

- P/E ratios hit astoundingly heights, and are inconsistent with long-term interest rates
  - markets may still be overvalued (but many stocks are becoming reasonably priced)
  - price depreciation during 2000 was hastened by weakening earnings (or even weakening expectations)
  - it is still difficult to make most quantitative models justify expected real returns in the near future
- We retain our bias towards long-run averages
- At the start of 2000, our projections were too conservative, yet by the end of the year we were too optimistic...

# Why Bother With Bonds?

## Years Like 2000

- Plan sponsors enjoyed the diversification benefit of bonds for the first time in a long time.
- A year ago we asked: “Is there a ‘regime change’ in the bond market? A paradigm shift? A new bond economy? Or are we all waiting for equities to tank?”
- Despite the surprise element of the timing, the market priced in the 50 bps move on January 4, and is reflecting at least two more 25 bps cuts this year. We will end up where we started in 1999, when bond yields fell south of 6%.

# 2001 Capital Market Projections

Asset Class	Index	Projected Annual Return	Projected Standard Deviation (Risk)	2001 "Sharpe"	2000 Projections		2000 "Sharpe"
<b>Equities</b>							
Broad Domestic Equity	CAI Broad	9.20%	16.20	0.25926	9.20	16.20	0.25926
Large Cap	S&P 500	8.90%	15.00	0.26000	8.90	15.00	0.26000
Small Cap	CAI Small	10.40%	25.00	0.21600	10.40	25.00	0.21600
International Equity	EAFE	9.80%	21.50	0.22326	9.75	21.50	0.22093
<b>Fixed Income</b>							
Domestic Fixed	LB Agg	6.45%	5.30	0.27358	6.70	5.50	0.30909
Non US\$ Fixed	SB Non US	6.25%	9.80	0.12755	6.50	10.00	0.15000
<b>Other</b>							
Real Estate	CRES	8.30%	16.50	0.20000	8.30	16.50	0.20000
Alternative Investments	VECO PSCI	12.00%	36.00	0.19444	11.50	36.00	0.18056
Cash Equivalents	T-bill	5.00%	0.70		5.00	0.70	
<b>Inflation</b>	CPI-U	3.25%	1.90		3.25	1.90	

# 2001 Capital Market Projections

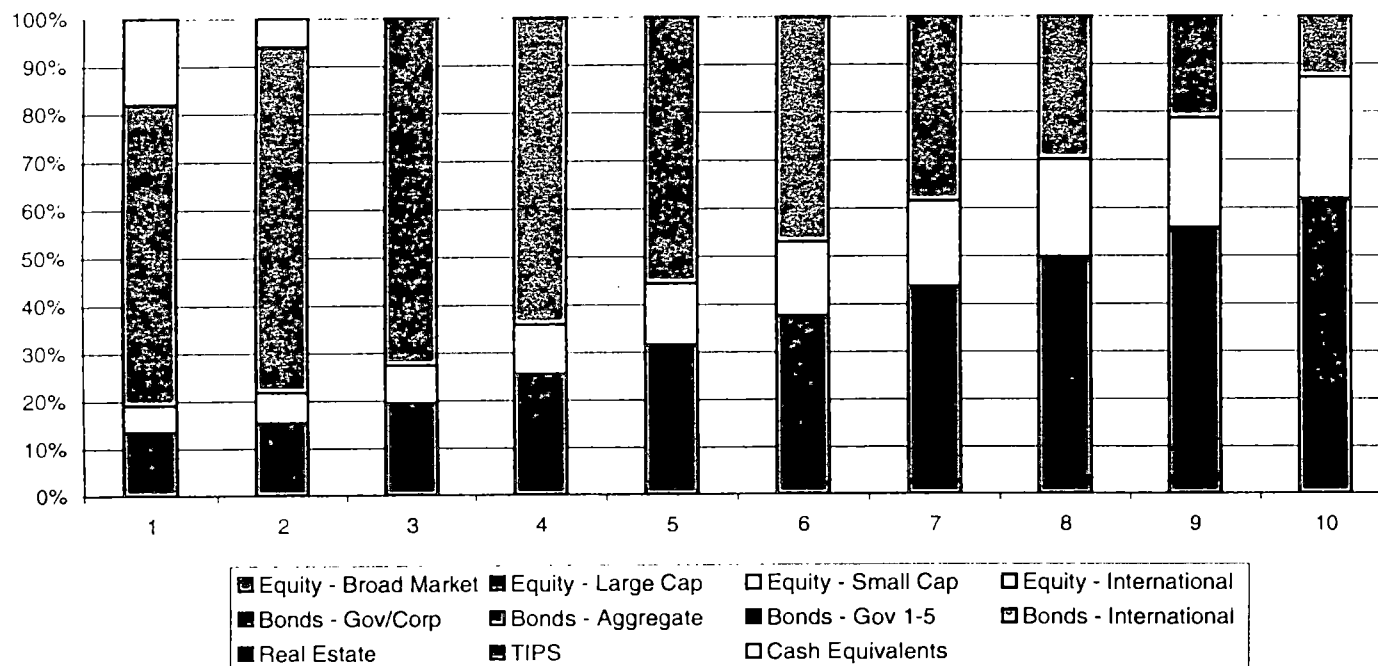
- We are challenged to come up with more than a few minor changes.
- Inflation has risen from 1.5% to 3% over the past two years, but the threat of further price acceleration is fading.
- Bond returns are lower, reflecting lower yields to maturity compared to a year ago.
- Equity return expectations remain essentially unchanged - below the long-run averages.
- We remain convinced that international belongs in a diversified portfolio, despite the second-worst absolute performance in 20 years.
- Real estate returns remain unchanged.
- Alternative returns were increased, raising the premium over the S&P 500 to 310 bps.

# Optimizations - Where The Rubber Meets the Road

- Compared to last year, portfolios with the same targeted level of return have a slightly higher level of risk, except for the most aggressive mixes.
- Small cap cap stocks account for a similar percentage of domestic equity (approximately 20%) across mixes reflecting a long-run neutral bias towards market capitalization.
- International equities account for a similar percentage of the total equity allocation (approximately 30%) across all mixes.
- For more aggressive mixes, portfolios with the same targeted percentage of equities face a lower returns but slightly higher expected risk.
- For conservative to moderate mixes (20% to 60% equity), risks and returns are lower.
- Allocations to domestic fixed income are lower across almost all mixes.

2001 Asset Classes	Constraints		Asset Mix Alternatives									
	Min	Max	1	2	3	4	5	6	7	8	9	10
Equity - Broad Market	0%	100%	13.46%	15.38%	19.43%	25.50%	31.57%	37.65%	43.72%	49.79%	55.86%	61.93%
Equity - Large Cap	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equity - Small Cap	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equity - International	0%	100%	5.69%	6.34%	7.93%	10.41%	12.89%	15.37%	17.84%	20.32%	22.80%	25.28%
Bonds - Gov/Corp	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bonds - Aggregate	0%	100%	62.88%	72.40%	72.64%	64.09%	55.54%	46.99%	38.44%	29.89%	21.34%	12.79%
Bonds - Gov 1-5	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bonds - International	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Estate	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TIPS	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cash Equivalents	0%	100%	17.97%	5.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Totals			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Target Return	6.750%	7.000%	7.250%	7.500%	7.750%	8.000%	8.250%	8.500%	8.750%	9.000%
Projected Return	6.750%	7.000%	7.250%	7.500%	7.750%	8.000%	8.250%	8.500%	8.750%	9.000%
Projected Risk	5.274%	6.018%	6.787%	7.694%	8.712%	9.808%	10.957%	12.145%	13.361%	14.599%
1 Yr. Probability of Loss	10.03%	12.24%	14.27%	16.48%	18.68%	20.73%	22.57%	24.20%	25.63%	26.88%





MIDDLETON & TIMME, P.C.

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April 2, 2001

Ms. Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 "G" Street  
Anchorage, AK 99501

VIA MESSENGER

Re: Karluk IRA Council

Dear Molly:

RECEIVED  
APR 02 2001  
EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

I understand that the Council is taking up the purchase of lands from the Karluk IRA Council. As you and the members of the Council are aware, this proposed purchase has resulted in the expression of a great deal of concern not only by the former shareholders of the Karluk ANCSA Corporation but by Koniag and Congressman Young as well. I regret that I was not able to comment earlier to you on your historical summary to the Trustee Council on the Karluk lands. The draft of the summary which I saw seemed to have failed to address the issues raised by Dennis Metrokin, the President of Koniag, in his letter to you of November 15, 2000.

Unlike the other purchases of Native owned land, this transaction raises a number of issues that warrant the Trustee Council's careful consideration. The draft summary took the position that the IRA Council has title to the land and that should be the only concern of the Trustees. But the Trustee Council has always been cautious when it has acquired Native lands because I believe that it rightly recognized the potential for abuse and the concern of the Native Community that such sales be the will of the Native people involved. The circumstances here clearly warrant the continuation of that caution.

Most telling are the facts about the Community. There are approximately 186 Alaska Natives who were enrolled to Karluk and who are former shareholders of the Karluk Native Corporation, the ANCSA Corporation that owned the land under consideration. During the tenure of the present leadership of the IRA Council, the population of Karluk has steadily declined. There are, at present, only 20 to 23 people living in Karluk. Under the Karluk IRA Constitution, only these 20 to 23 individuals can serve on the IRA Council. But more importantly,

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only these 20 to 23 people have the right to vote on which of them will be the members of the IRA Council.

As part of the 1980 merger of the Karluk ANCSA Village Corporation with Koniag, a compromise was reached as to the future ownership of the lands owned by the Corporation. Ten acres for each of the original enrollees (shareholders) of the Corporation or 1,860 acres was reserved from the merger and was not to have been transferred to Koniag as part of the assets of the Village Corporation. These lands were to be conveyed to either a new organization or the IRA Council for the apparent purpose of providing lands for the benefit of the former shareholders. This compromise was made part of the merger plan. As part of the merger proxy, it was explained that upon the Village Corporation's conveyance of the land, the land was to be held or distributed to the former shareholders as the successor organization saw fit. In the case of Larsen Bay retained lands, the organization chose to distribute the land to the former shareholders. In both the Larsen Bay and the Karluk situation, the input of the former shareholders was solicited in order to determine which lands were to be withheld from the transfer to Koniag. This input took the form of each shareholder indicating on a map the location of a ten acre parcel. During this process, there was no discussion of the sale of these lands to third parties. A sale would have been inconsistent with the purposes for which title to the land was being retained.

The former shareholders voted not to establish an additional new organization but rather to have the IRA Council hold the land. In the early 1990's when the present leadership in Karluk came into power, negotiations occurred under which a special Land Committee was established to oversee decisions regarding these lands. Representatives of the former shareholders living outside the village were seated on the Committee. Prior to the present sale discussions, the Committee was disbanded by the Council President and the overwhelming majority of the former shareholders who are the intended beneficiaries of the land, was left without a voice in present discussions.

Last summer, the IRA Council made it known that if there is a sale of the lands, that it will distribute the proceeds only the 20 or so current residents of Karluk, comprised primarily of themselves and their families. The balance of the 186 former shareholders will receive nothing. It should be noted that it isn't clear how many of the 20 plus current residents who will be receiving the windfall are even former shareholders of the Village Corporation.

In my prior discussions with Alex and, I believe with you as well, I mentioned Koniag's belief that this land was subject to a constructive trust. There seems to be some confusion about a constructive trust. A constructive trust is not created by a document but arises as the result of the operation of law. It is created

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when a person acquires legal title to property under circumstances where the beneficial interest in the property is held by another. In the present situation, the land was conveyed to the IRA Council based upon an implied agreement by it to honor the purposes of the merger plan. That understanding was the basis upon which the former shareholders voted to have the IRA Council receive the land. The actual deed to the IRA Council clearly states that it was made pursuant to the Plan of Merger. Now, rather than holding the land for the benefit of all of the former members, residents and non-residents alike, the IRA Council proposes to sell the land and distribute the proceeds only to the group of 20 or so persons who are current residents of Karluk, of which the council members and their families are members.

As requested by Alex, I am enclosing a copy of the Plan of Merger and Proxy Statement, which I believe support the belief by the former shareholders that the land was to be managed for their benefit.

There are additional warning signs with respect to the prior actions of the IRA Council which would appear to warrant further caution. First, it is my understanding that while denying the right to vote or even membership in the IRA to the non-resident former shareholders, the IRA Council has nevertheless routinely included all of the 186 former shareholders in its listing of its membership for the purposes of obtaining funding for its operations from the BIA and has been funded on that basis.

Second, I have also been advised that notwithstanding the provisions of the IRA Constitution, the Council presently includes two individuals who are not residents of Karluk and thus who are not qualified to serve on the Council.

Third, in discussions with representatives of the Kodiak Island Borough, I have been advised that the Borough ceased providing funding to the Council for the community because of the Council's repeated failure to account for the money.

I am also enclosing a copy of a letter sent to the BIA by a consultant retained by the BIA to work with this Council. In this letter the consultant enumerates a number of questionable practices and apparent misuse of funds by the Council. The consultant requested an investigation, and it is my understanding that the BIA failed to conduct one.

All of these concerns and others have also been communicated to the BIA by representatives of the Karluk community in an effort to have an independent investigation and audit performed to determine their truth.

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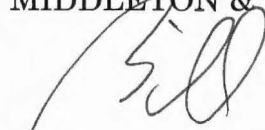
These alleged actions raise serious questions about the integrity of the IRA Council and the validity of decisions made by it. Should the investigation of these actions determine that the Council knowingly misrepresented its membership or that it misused grant monies, a real issue exists as to whether this Council as presently constituted, is the proper entity with which the Trustee Council should be dealing.

There is no question about the advantages to the State and the United States of acquiring these lands. It is equally true that as recent as this winter, the IRA Council vehemently opposed the sale of or the granting of an easement on any Native lands on the Karluk River, presenting testimony to the Trustee Council regarding how such a transaction would adversely affect the village. The Trustee Council must be especially cautious that it not be accused of dismissing the questions being raised about the IRA Council's actions, simply in order to take advantage of the IRA Council's sudden change of heart.

The excellent reputation of the Trustees for due inquiry into the purchase of Native lands is well deserved. That caution is especially appropriate in light of the seat that the Department of the Interior has on the Trustee Council, and the unique relationship that the Department has with Alaska Natives. It would certainly be appropriate for the Trustee Council to defer taking action on the proposed purchase until the BIA has conducted a thorough investigation into the alleged actions of the IRA Council and has resolved the questions surrounding them. Once the questions are resolved there would still be ample time to complete the purchase should the allegations prove to be false and the former shareholders are shown to be fully participating in the decision to sell.

Yours truly,

MIDDLETON & TIMME, P.C.



William H. Timme

WHT:ef

Enclosures

cc: Dennis Metrokin, President, Koniag, Inc.  
Glenn Godfrey, Chairman, Koniag, Inc.  
Alex Swiderski, Assistant Attorney General  
Charles Reft



JOINT PROXY STATEMENT

Koniag, Inc.  
P.O. Box 746  
Kodiak, AK 99615

Afognak Native Corp.  
P.O. Box 14  
Kodiak, AK 99615

Akhiok-Kaguyak, Inc.  
Akhiok Rural Station  
Akhiok, AK 99615

Karluk Native Corp.  
P.O. Box 2682  
Kodiak, AK 99615

Leisnoi, Inc.  
P.O. Box 641  
Kodiak, AK 99615

Nu-Nachk-Pit, Inc.  
Larsen Bay  
Alaska 99624

Old Harbor Native Corp.  
P.O. Box 35  
Old Harbor, AK 99643

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## INTRODUCTION

The Boards of Directors of Koniag, Inc., and of the village corporations, Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc. and Old Harbor Native Corp. (merging village corporations), are soliciting proxies for use at the upcoming annual or special meetings of their stockholders. At these meetings, you the stockholders will vote on a plan to merge Koniag, Inc. and the merging village corporations into one corporation, called Koniag, Inc., and at the Koniag Annual Meeting you will elect four new Koniag, Inc. directors. This proxy statement and the attached financial packet has information to help you decide how to vote on these important issues. At least half of all the stockholders of Koniag and of each merging village corporation must vote yes on merger before any village corporation can merge under the plan. It is important to vote. If you do not vote, by proxy or in person, you will be counted as voting against merger.

Attached are a proxy for your shares in Koniag, Inc., and, if you are a shareholder in Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., or Old Harbor Native Corp., a proxy for your shares in that corporation. Please complete, date and sign the proxy or proxies and return them in the enclosed envelopes as soon as possible. For Koniag, Inc. and all village corporations but Afognak Native Corporation, a proxy must be physically received before 5:00-p.m. on December 1, 1980, at Coopers and Lybrand, 430 West Seventh Avenue, Anchorage, Alaska, 99501, to be effective. Proxies for shares in Afognak Native Corporation must be physically received by Coopers and Lybrand in Anchorage before 5:00 p.m. on December 1, 1980 or physically delivered to Coopers and Lybrand representatives in Kodiak before the vote is taken.



A. Stockholder Meetings

The annual or special meetings will be held as follows:

Koniag, Inc. (annual meeting)	Date: 12/6/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Afognak Native Corporation (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Akhiok-Kaguyak, Inc. (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Karluk Native Corporation (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Leisnoi, Inc. (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Nu-Nachk-Pit, Inc. (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	
Old Harbor Native Corporation (special meeting to vote on merger)	Date: 12/4/80	Time: 10:00 a.m.
	Place: Elks Club, Kodiak, Alaska	

## B. The Merger Plan

Merger is the combination of two or more corporations into one of those corporations, called the surviving corporation. The surviving corporation acquires the assets and assumes the liabilities of the merging corporations, and the separate corporate forms of the merging corporations end. The Alaska Native Claims Settlement Act (hereafter "ANCSA") and the Alaska Business Corporation Act govern mergers among Alaska Native corporations.

You will find the official plan of merger attached as Appendix A. Its major points are explained below.

### Transfer of Assets and Liabilities to Koniag, Inc.

The plan of merger provides that, in exchange for new Koniag, Inc. stock issued to the shareholders of the merging village corporations, those corporations will transfer all their assets and liabilities to Koniag, Inc. except as described below.

#### Land

Up to ten acres of land per enrollee will be reserved by the merging village corporation and transferred to a village IRA council or other new village organization. The new village organization can hold this land or distribute it to its shareholders as it sees fit. The maximum acreage to be reserved for the new village organization is as follows:

Afognak Native Corp.	5,140 acres	
Akhiok-Kaguyak, Inc.	1,470 acres	
Karluk Native Corp.	<u>1,860 acres</u>	186 : \$35,340
Leisnoi, Inc.	2,960 acres	<del>296</del>
Nu-Nachk-Pit, Inc.	<u>2,030 acres</u>	203 : \$38,570
Old Harbor Native Corp.	3,350 acres	

#### Money

The plan of merger provides that the merging village corporations will reserve Alaska Native Fund money received after June 30, 1980, and before merger. Most of this money would be distributed by Koniag, Inc. directly to shareholders as soon as possible after the merger is effective. The remainder would be distributed to the new village organization for operational expenses.

<u>Corporation</u>	<u>Direct Distribution to Shareholders</u>	<u>Approximate Amount Distributed to New Village Organization*</u>
Afognak Native Corporation	\$2,100/100 shares	\$97,660
Akhiok-Kaguyak, Inc.	\$2,100/100 shares	\$27,930
Karluk Native Corporation	\$2,100/10 shares**	\$35,340
Leisnoi, Inc.	\$2,100/10 shares**	\$56,240
Nu-Nachk-Pit, Inc.	\$2,100/10 shares**	\$38,570
Old Harbor Native Corporation	\$2,100/100 shares	\$63,650

\*Based on the September 30, 1980 Alaska Native Fund distribution, calculated at \$190 per enrollee.

\*\*These corporations authorized only ten shares per original shareholder instead of 100.

#### WHO APPROVES THE MERGER?

The Boards of Directors have approved this plan and recommend it to you, the shareholders, for approval. The holders of more than half of the shares of each of the corporations must vote for merger for it to happen.

#### WHAT HAPPENS TO THE MERGING VILLAGE CORPORATIONS?

At the effective date of merger (when the State of Alaska issues the Certificate of Merger), the village corporations in the merger would be merged with Koniag, Inc., and would no longer exist as separate corporations. All their assets, liabilities, rights and obligations, except the land and money described above, would be acquired or assumed by Koniag, Inc., the surviving corporation.

#### WHAT HAPPENS TO KONIAG, INC.?

Koniag, Inc., on the effective date of the merger, as the surviving corporation, would acquire the assets and resources of the village corporations which approve the merger, and assume their liabilities and obligations, including any obligations to make ANCSA 14(c) conveyances

on transferred lands, to pay debts, and the like. Koniag would acquire rights or title to about 789,610 acres of land if each village corporation approves merger. The Board will remain at 13 at-large members.

#### WHAT HAPPENS TO EXISTING STOCK IN KONIAG, INC.?

There would not be any change in the voting or distribution rights of Class A or Class B shares now held by Koniag, Inc. shareholders. Because there would be more shares of Koniag, Inc. outstanding after merger, the voting power of each existing share, and the percentage of ownership of Koniag, Inc. each share represents, would be lessened to some extent by the merger. However, Koniag, Inc. would become a much larger corporation after consolidation of the assets of the village corporations. There is no guarantee or representation that a share in Koniag, Inc. would increase in value as a result of the merger. However, management believes that the shareholders of Koniag, Inc. will benefit from the merger.

#### WHAT HAPPENS TO STOCK IN AFOGNAK NATIVE CORP., AKHIOK-KAGUYAK, INC., KARLUK NATIVE CORP., LEISNOI, INC., NU-NACHK-PIT, INC., AND OLD HARBOR NATIVE CORP.?

On the effective date of merger, the shares of village corporations which approve merger would be automatically exchanged for new shares in Koniag, Inc. New certificates would be issued. The table below shows how many shares would be issued to each shareholder, and the total shares issued, if merger is approved.

<u>Corporation</u>	<u>Existing Shares for Koniag, Inc. Shares</u>	<u>Total New Koniag, Inc. Shares</u>
Afognak Native Corp.	100 for 100	51,400
Akhiok-Kaguyak, Inc.	100 for 100	14,700
Karluk Native Corp.	10* for 100	18,600
Leisnoi, Inc.	10* for 100	29,600
Nu-Nachk-Pit, Inc.	10* for 100	20,300
Old Harbor Native Corp.	100 for 100	33,500
		<u>168,100</u>

\*These corporations authorized only ten shares per original shareholder instead of 100.

The new shares of Koniag, Inc. stock issued in exchange for merging village stock would be Class B stock. Owners of Class B stock, like the at-large shareholders who now hold Class B stock, are entitled to direct distribution of Alaska Native Fund and 7(i) moneys, in addition to dividends, if any, received by all Koniag, Inc. shareholders. Class B shares have the same voting rights as Class A shares. These new shares, like existing Koniag shares, would not have any pre-emptive rights (rights of first refusal on new shares).

Koniag, Inc. would issue these shares of Class B stock to village corporation shareholders in consideration for their shares in the merging village corporations. Each village corporation has different assets and liabilities, and each village corporation has a different number of shareholders. The Boards of Directors of Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., believe that the terms of the merger are fair. However, the Boards have not attempted to put a value on either the Koniag shares or the village corporation shares, nor has any independent third party been requested to do so. Therefore, it is not known whether each village corporation's shares are equal in value to the Koniag shares, land and money given in exchange, or whether the consideration Koniag receives from any village corporation is equivalent to that received from any other. This proxy statement has information on all the merging corporations to help you evaluate the merger for yourself. Financial data on the merging corporations is included as Appendix B.

C. How Does Merger Affect You As A Shareholder?

If you own Koniag, Inc. stock and merging village corporation stock, and if merger is approved,

You would receive:

(a) 100 shares of Koniag, Inc. Class B stock (in addition to 100 shares of Koniag, Inc. Class A stock you already own).\*

(b) \$2,100\* upon merger and later direct distribution of other Alaska Native Fund and 7(i) moneys.

(c) Greater shareholder control over Koniag, Inc. affairs.

\*Calculations based on your owning 100 shares of Afognak Native Corp., Akhiok-Kaguyak, Inc. or Old Harbor Native Corp.; or 10 shares of Karluk Native Corp., Leisnoi, Inc., or Nu-Nachk-Pit, Inc.

You would give up:

(a) Your shares in your village corporation (it would no longer exist).

(b) Shareholder control of village corporation affairs and of most village corporation lands.

Your new village organization would receive:

(a) Up to ten acres per shareholder.

(b) The right to withhold consent to mineral exploration, development and removal within the boundaries of the received land.

(c) Alaska Native Fund moneys received after June 30, 1980 and before merger and not distributed directly to you.

If you own Koniag, Inc. stock only (Class B shares), and if merger is approved,

You would receive:

(a) A proportionate share, through Koniag, Inc., in the assets and liabilities of the merging village corporations. Your percentage ownership interest in Koniag, Inc. after merger would be less than your percentage ownership in Koniag before merger. Koniag would, however, be a larger, stronger corporation.

You would retain:

(a) All voting and dividend rights in your Koniag stock.

(b) All rights to distributions under the Alaska Native Fund and Section 7(i) of the Alaska Native Claims Settlement Act.

If you own Koniag, Inc. stock (Class A) and non-merging village corporation stock, if merger is approved,

You would receive:

(a) A proportionate share, through Koniag, Inc., of the assets and liabilities of the merging village corporations. Your percentage ownership in Koniag, Inc. after merger would be less than your percentage ownership before merger. However, Koniag would be a larger, stronger corporation.

You would retain:

- (a) All voting and dividend rights in Koniag, Inc.
- (b) All shares in your non-merging village corporation.

#### D. Why Merge?

Merger is not a new idea. Koniag, Inc. and the village corporations have discussed it for some time. In 1976, Congress amended ANCSA to provide specifically for merger of Native corporations. The NANA Regional Corporation and all its village corporations (except one) merged in 1976. Just this year, Ahtna Regional Corporation and all its village corporations (except one) merged. Both plans of merger differed from this one. Several village corporations throughout the state have also merged, including Akhiok, Inc. and Kaguyak, Inc.; and Natives of Afognak, Inc. and Port Lions Native Corp.

The Boards of Directors of Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., believe that the common interests of their shareholders will be best served by merger for several reasons.

First, by consolidation of land and financial resources, the new merged corporation will have greater opportunities to manage those consolidated resources for the benefit of the shareholders. As shown by the maps following page 17 of this statement, land holdings now are divided among Koniag, Inc. and the village corporations. If merger is approved, the new corporation will own all the lands and land rights now owned by the merging village corporations (except the ten acres per shareholder held by the new village organizations). This land, totaling about 789,610 acres, includes valuable timber land. Koniag will also acquire the merging village corporations' investments and ownership in businesses. Remember also that the new corporation will acquire the merging village corporations' liabilities. Although there is no guarantee of profits and dividends, the Boards of Directors of Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., believe that the opportunities for success will be much greater for the larger consolidated corporation. (See the pro forma combined summary of operations and the pro forma combined balance sheet in Appendix B.)

Second, by merger, the new larger corporation will be able to consolidate management efforts and reduce administrative burdens. Now, Koniag, Inc. and each of the merging village corporations have their own Boards of Directors, officers, accountants, lawyers, and other paid staff. In some cases the separate management staffs are very costly. By merging, the new larger corporation will have one management staff. The Boards of Directors of Koniag, Inc. and the merging village corporations believe that a consolidated management effort will be more efficient in providing good management for our shareholders' assets.



Finally, as Natives with a common interest, we must look to the future. Under certain terms of ANCSA, Native corporations receive various advantages and protections not available to other profit corporations. Undeveloped Native lands are not subject to real property tax until January 1, 1992 under current law. Stock in Native corporations cannot be sold to outsiders or put on the market until January 1, 1992.

These protections expire in 1992 and Native corporations will be treated like other profit corporations. The Boards of Directors of Koniag, Inc. and the merging village corporations believe that now is the time for preparing for the future. The Boards believe that by consolidating our assets and our efforts now, the new merged corporation will be best able to handle the additional burdens which will be imposed in 1992 and thereafter. (There is pending in Congress proposed legislation which will alter these laws. See Section J for further discussion of these proposed amendments.)

These are some of the reasons why the Boards of Directors of Koniag, Inc. and the merging village corporations believe that merger is the right thing to do.

Please read this entire statement very carefully and make your own decision. If you agree that merger is the right thing to do, be sure to sign and date the enclosed proxy or proxies and return it (or them) as quickly as possible. REMEMBER, IF YOU DO NOT SIGN A PROXY AND YOU DO NOT ATTEND THE KONIAG ANNUAL OR YOUR VILLAGE CORPORATION SPECIAL MEETING, YOU WILL BE COUNTED AS VOTING AGAINST THE MERGER.

E. Subsistence Use of Koniag, Inc. Lands

At the Koniag, Inc. Board of Directors Meeting at which the plan of merger was approved, the Koniag Board also adopted a policy recognizing the interest of Koniag shareholders in continued subsistence use of lands now owned by Koniag, Inc. or to be received by Koniag as a result of the merger. The Board resolved to consider such subsistence uses prior to taking any action for disposal or other use of Koniag, Inc. lands.

F. How Does The Merger Come About?

The Boards of Directors of Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., have approved the plan of merger. It must now be voted on by the shareholders of each corporation, at its annual or special meeting. All shareholders are entitled to vote, including non-Native shareholders who inherited shares.

AT EACH MEETING, THE MERGER MUST BE APPROVED BY THE HOLDERS OF MORE THAN HALF OF ALL THE SHARES IN THE CORPORATION TO BE EFFECTIVE.

This means that approval is required from more than half of all shareholders, not just those who give proxies or vote at the meeting. If you do not vote, you will be counted as voting against the merger.

If the shareholders of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., Old Harbor Native Corp., and Koniag, Inc., approve the merger, it will become effective as soon as the merger documents are filed with and approved by the State of Alaska. If Koniag, Inc. shareholders do not approve the merger, it will not happen. If Koniag, Inc. shareholders and the shareholders of any merging village corporation approve the merger, even if other merging village corporation shareholders do not approve it, the merger will become effective as to Koniag, Inc. and the approving village corporation. At any time a Board of Directors may vote to abandon the merger before it becomes effective. The merger also amends the Koniag, Inc. Articles of Incorporation to conform to the merger.

If you are a shareholder in Koniag, Inc. and in one of the village corporations seeking to merge, you can vote at both meetings, in person or by proxy. You may vote your shares different ways. For example, if you favor merger for Koniag, Inc. and the other merging village corporations, but do not favor it for your village corporation, you can vote "yes" on your Koniag proxy and "no" on your village corporation proxy.

The shares outstanding in each corporation are:

	<u>Number of Shares</u>	<u>Number Needed to Approve Merger</u>
Koniag, Inc.	333,100	166,551
Afognak Native Corporation	51,400	25,701
Akhiok-Kaguyak, Inc.	14,700	7,351
Karluk Native Corporation	1,860	931
Leisnoi, Inc.	2,960	1,481
Nu-Nachk-Pit, Inc.	2,030	1,016
Old Harbor Native Corporation	33,500	16,751

The record date for Koniag, Inc., when the shareholder rolls closed was October 20, 1980.

#### G. Common Directors--Potential Conflict of Interest

Some members of the Board of Directors of Koniag, Inc. are also members of the Boards of Directors of the merging village corporations. They voted on the question of merger at their village corporations' Board of Directors meetings and at the Koniag, Inc. Board of Directors meeting. Prior to the vote on merger at the Koniag, Inc. Board of Directors meeting, the Directors discussed the potential conflict of interest of those members. The Koniag, Inc. Board members who are also members of the Boards of Directors of the merging village corporations, and their votes are listed below:

1. Karl Armstrong, Leisnoi, Inc., voted for merger as a Leisnoi, Inc. Director, and voted for merger as a Koniag, Inc. Director. Mr. Armstrong is also the Executive Vice President of Koniag, Inc.

2. Sven Haakanson, Old Harbor Native Corp., voted for merger as an Old Harbor Native Corp. Director, and voted for merger as a Koniag, Inc. Director.

3. Allen Panamaroff, Karluk Native Corp., voted for merger as a Director of Karluk Native Corp., and voted for merger as a Koniag, Inc. Director.

4. Richard Wamser, Afognak Native Corp., voted against merger as a Director of Afognak Native Corp., and voted for merger as a Director of Koniag, Inc.

5. Jack Wick, Nu-Nachk-Pit, Inc., voted for merger as a Nu-Nachk-Pit, Inc. Director, and voted for merger as a Koniag, Inc. Director.

Certain directors of merging village corporations are also employees of Koniag, Inc. In addition to Karl Armstrong, Executive Vice President of Koniag, Inc., mentioned above, these directors are:

Carlene Mahle, Director of Leisnoi, Inc., and Senior Accountant for Koniag, Inc., who voted for merger.

Gene Sundberg, Director of Afognak Native Corp. and Vice President for Lands of Koniag, Inc., who voted for merger.

Marie Unger, Director of Leisnoi, Inc., and Executive Assistant of Koniag, Inc., who voted for merger.

The Koniag, Inc. Board (13 members) voted unanimously (12-0) to approve the merger. The Afognak Native Corp. Board (9 members) voted 6 to 2 to approve the merger. The Akhiok-Kaguyak, Inc. Board (7 members) voted 7 to 0 to approve merger. The Karluk Native Corp. Board (9 members) voted 6 to 1 to approve merger. The Leisnoi, Inc. Board (9 members) voted 9 to 0 to approve the merger. The Nu-Nachk-Pit, Inc. Board (9 members) voted 7 to 0 to approve the merger. The Old Harbor Native Corp. Board (9 members) voted 5 to 0 to approve the merger.

#### H. Proxies and Voting

On your proxy you will see a place to vote for or against merger. The Boards of Directors of Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., urge you to vote for merger on the proxy even if you plan to come to the annual meeting. Remember to date, sign and return your proxy to Coopers and Lybrand in Anchorage on or before 5:00 p.m., December 1, 1980 (or to Coopers and Lybrand in Kodiak prior to the special meeting on December 4 if you are an Afognak Native Corporation shareholder).

You may revoke a proxy you returned to a village corporation by, before the vote is taken notifying the village corporation in writing, or signing a subsequent proxy before 5:00 p.m., December 1, 1980, or attending the annual meeting and notifying the person registering stockholders that you wish to revoke your proxy.

You may revoke a proxy you returned to Koniag, Inc. before the vote is taken by notifying Koniag, Inc., P.O. Box 746, Kodiak, Alaska, 99615, in writing, or signing a subsequent proxy before 5:00 p.m., December 1, 1980, or attending the annual meeting and notifying the person registering stockholders that you wish to revoke your proxy.

If you revoke your proxy, you may vote your shares in person at the annual meeting. All proxies properly executed and received prior to the cut-off date, and not revoked, will be voted as indicated on the proxy. FAILURE TO VOTE IS A VOTE AGAINST MERGER.

#### Cumulative Rights

When voting for Koniag directors, each shareholder has the number of votes equal to the number of shares owned times the number of directors to be elected. Four directors will be elected at the Koniag Annual Meeting on November 15, 1980. If you own 100 shares of Koniag, Inc., for example, you have 400 votes for director. With cumulative voting, you may cast your votes all for one person, or distribute them among as many candidates as you wish, in the amounts you wish. This method of voting was designed to protect the interests of minority shareholders. A proxy should indicate whether you give the proxy the authority to cumulate your votes.

## I. Dissenter's Rights

Under Section 30(b) of ANCSA, any rights accorded under Alaska law to dissenting shareholders in a merger may not be exercised in any merger effected before December 19, 1991. (Alaska law provides dissenting shareholders in other merging non-Native corporations with the right to force sale of their shares.)

## J. ANCSA and Merger

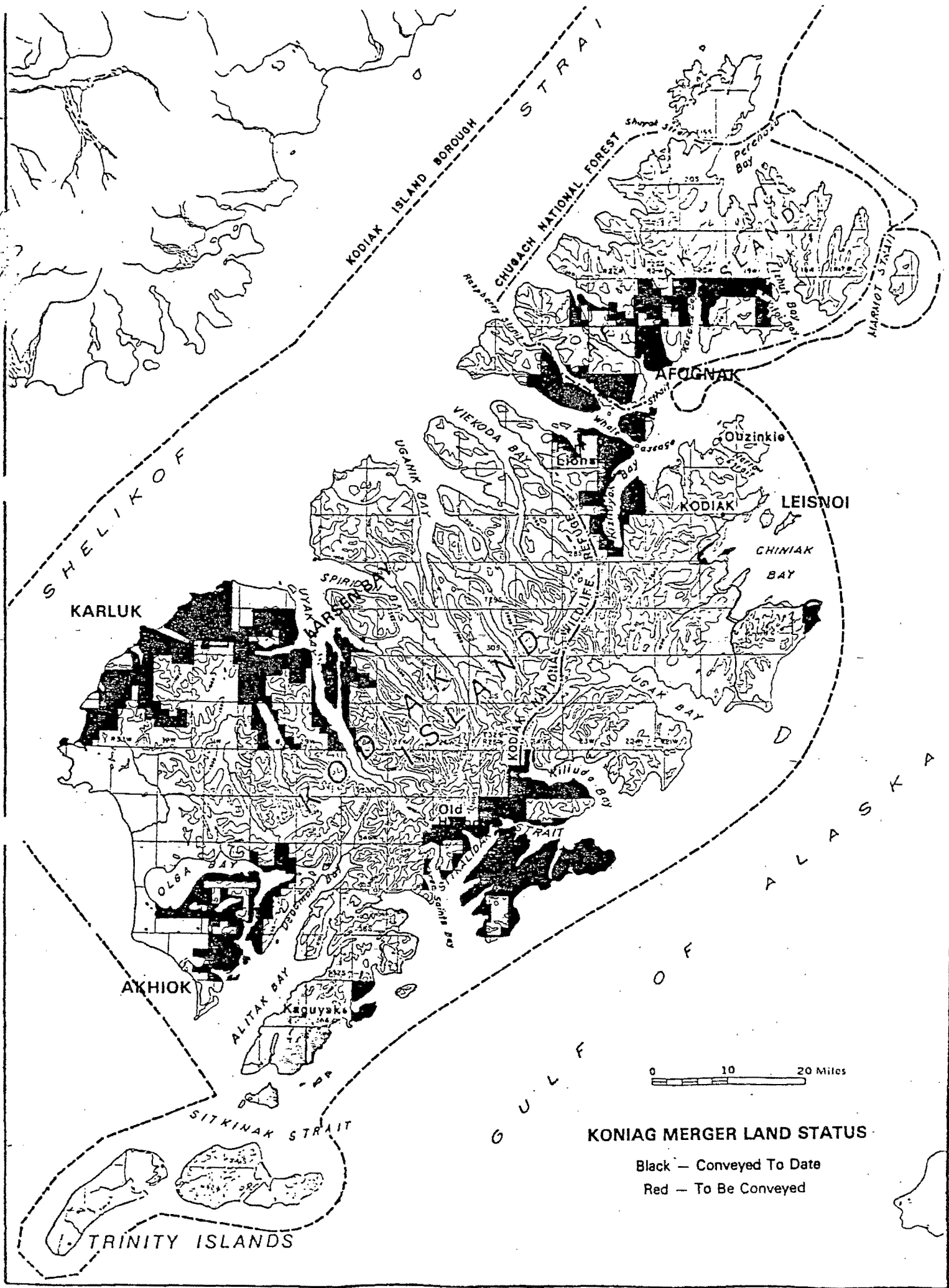
ANCSA, which became law on December 18, 1971, provided for a settlement of all aboriginal land claims by Alaska Natives. ANCSA was amended by Congress several times in the past and may be amended again.

Koniag, Inc. and the village corporations in the Koniag region operate under ANCSA, the federal law, as well as the Alaska Business Corporation Act, the state law governing corporations. Parts of ANCSA are important to consider in making your decision about merger.

### Land

Under ANCSA, Koniag and the village corporations are entitled to large amounts of federal land. Koniag, Inc. receives, in addition to its land, the subsurface rights to land conveyed to the village corporations, or in lieu subsurface in the event the surface is in a wildlife refuge. Following this page you will find maps of the land selected by or conveyed to Koniag, Inc., Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., including the contemplated Afognak Island land trade (see Section K).



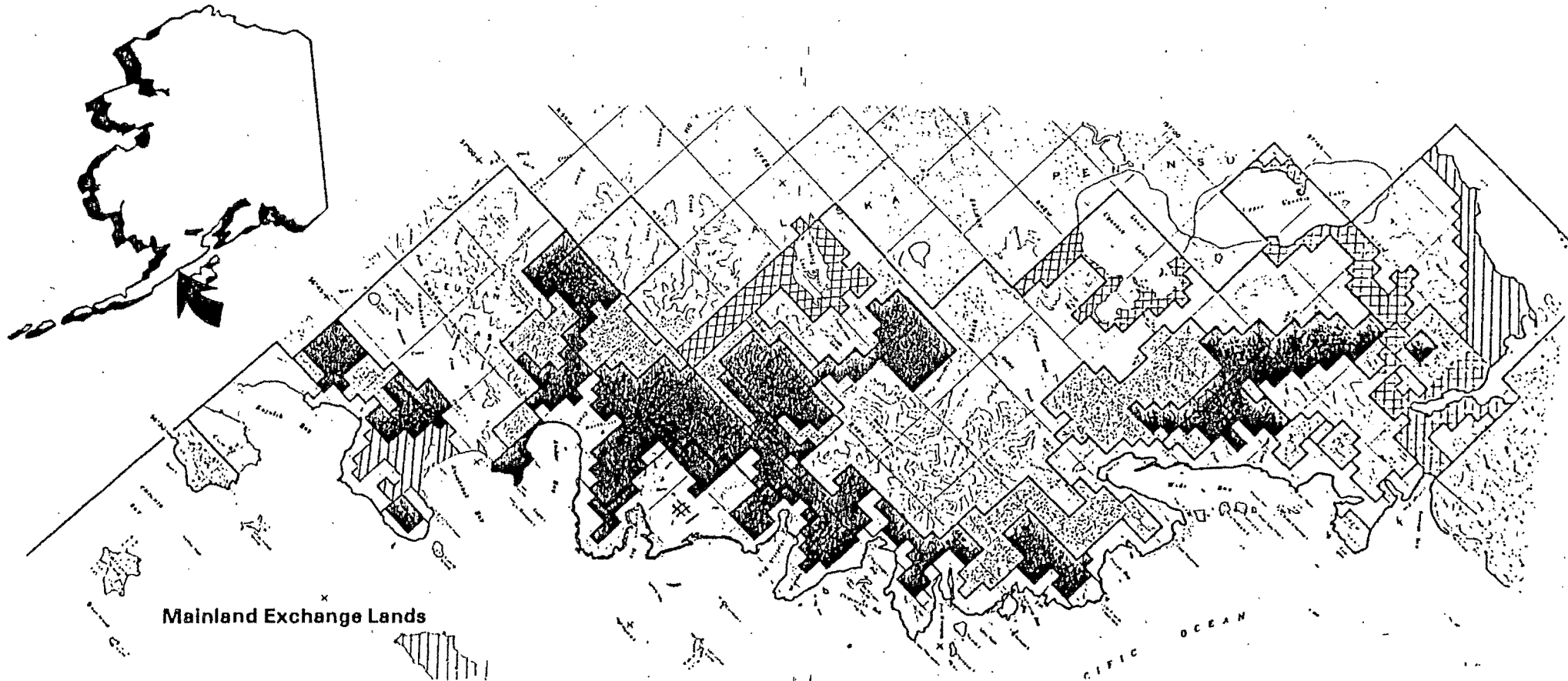


### KONIAG MERGER LAND STATUS

- Black — Conveyed To Date
- Red — To Be Conveyed

## D-2 IMPACT ON KONIAG AND KONIAG VILLAGES LAND ON THE MAINLAND

- Yellow — Village surface and Koniag subsurface exchanged for surface and subsurface lands on Afognak
- Green — Koniag subsurface in lieu are retained for oil and gas purposes only
- Red — Drilling Block #1: Surface conveyed to Afognak Native Corp., subsurface conveyed to Koniag, Inc.



Once transfer is effected — all surface lands within the withdrawal are returned to the Federal Government and become part of the Alaska Peninsula Wildlife Refuge under the jurisdiction of the U.S. Fish and Wildlife Service.

Land entitlements for the merging corporations are:

<u>Village Corporation</u>	<u>Acres Entitled</u>	<u>Interim Conveyance</u>	<u>Date</u>
<u>Merging</u>			
Afognak Native Corp.	230,400	185,878.83	6/20/77-6/30/78, 7/26/79, 6/20/80
Akhiok-Kaguyak, Inc.	138,240	63,358.00	8/11/78, 11/21/78
Karluk Native Corp.	92,160	83,767.00	6/30/78
Leisnoi, Inc.	115,200	3,394.00	4/9/79
Nu-Nachk-Pit, Inc.	115,200	72,144.27	8/24/78
Old Harbor Native Corp.	115,200	102,008.29	3/8/79-9/14/79
<u>Non-Merging</u>			
Ouzinkie	115,200	46,296.02	4/13/77-8/3/77
Natives of Kodiak	23,040	21,734.00	6/2/78
<u>Village Corporation 12(b) Entitlement</u>			
(To be allocated to village corporations by Koniag, Inc.)	103,766		
<u>Koniag, Inc.</u>			
Surface	53,451	843.78	
Subsurface	1,101,857	<u>389,860.36</u>	
Total Surface Conveyed to Date		579,424.19	
Koniag Subsurface Conveyed to Date		389,860.36	

#### Section 14(c) of ANCSA

Section 14(c) of ANCSA provides, in part, that the village corporations must convey to municipal governments and private individuals certain lands the village corporations received under ANCSA. These lands include lands occupied by any Native or non-Native occupant as a primary place of business, primary place of residence, subsistence campsite, or headquarters for reindeer husbandry. In addition, the village corporations must convey to a municipal corporation in the Native village, or the State of Alaska in trust for such corporation, title to land necessary for community expansion, airport sites, and the like. The exact scope of the village corporations' obligations under this section has yet to be determined. However, it is safe to say that the village corporations' landholdings may be reduced by their obligations under this provision of ANCSA.

#### Section 14(f) of ANCSA

Section 14(f) of ANCSA provides that each village corporation may withhold consent for mineral exploration, development or removal within the boundaries of the Native village. It also provides that this power to withhold consent will transfer to another organization of Native village residents in the event of merger. As you can see, the merger plan provides for this power to go to the village IRA or a new village organization, set up to handle the retained land and money. The plan defines land within the boundaries of the Native village as that land retained by the village IRA or other organization. Koniag, Inc. will have the power to sell or otherwise develop all land transferred to Koniag, Inc. if the merger is approved.

#### Section 22(g) of ANCSA

Section 22(g) of ANCSA provides that when the surface estate of lands in a unit of the National Wildlife Refuge System is conveyed to a Native corporation, those lands must be conveyed subject to the laws and regulations governing use and development of lands in such refuge. That means that lands conveyed from the Kodiak Island National Wildlife Refuge are subject to more restrictions than lands conveyed to Native corporations from other areas. The precise extent of those restrictions has not yet been determined. Koniag village corporations will receive the following acreage from the Kodiak Island National Wildlife Refuge: Akhiok-Kaguyak, Inc., 138,240 acres; Karluk Native Corp., 69,120 acres; Nu-Nachk-Pit, Inc., 69,120 acres; and Old Harbor Native Corp., 44,000 acres.

### Money

Shareholders in Koniag, Inc. have certain rights under ANCSA to distributions of cash from the Alaska Native Fund, and from the mineral and timber revenue which regional corporations must share with each other under Section 7(i) of ANCSA.

Koniag, Inc. receives money from the Alaska Native Fund, under Section 7 of ANCSA. After September 30, 1980, Koniag will receive approximately \$1,291,774 from that Fund. Of this amount, Koniag will be required to distribute one-half, \$645,887, to existing village corporations and Class B shareholders.

Under Section 7(i) of ANCSA, Koniag receives payments from other regional corporations based on revenues received from those corporations' subsurface and timber holdings. One-half of 7(i) money received by Koniag, Inc. must be distributed to existing village corporations and Class B shareholders.

### Stock

ANCSA required Koniag, Inc. and the village corporations to issue shares to Natives enrolled in them. Stockholders have the right to control management of their corporations through voting, and the right to receive dividends and distributions. Until 1992, under current law, stock in Koniag, Inc. and the village corporations cannot be alienated (transferred) in any way except by inheritance, or court orders of divorce or child support.

### Proposed Amendments to ANCSA

Pending in Congress is legislation (the D-2 bill) which contains proposed amendments to ANCSA which are important to consider. In addition to the Afognak Island Land Trade (see Section K) there are provisions modifying the tax moratorium on Native-owned lands and the stock alienation provisions of ANCSA.

ANCSA provides that Native-owned lands, as long as they are not developed or leased to third parties, will not be subject to real property taxes for a period of 20 years after passage of the Act (or until December 31, 1991). The D-2 bill, if passed, would amend that provision to provide that any undeveloped and unleased Native-owned lands would be exempt from real property taxes until 20 years after conveyance to the Native corporation, rather than 20 years after passage of ANCSA. The practical effect of this amendment would be to extend the tax moratorium on most Koniag and Koniag village corporation lands for at least four to five more years.

The proposed amendments to ANCSA also contain a provision modifying the stock alienation restrictions of ANCSA. The proposed amendments provide that prior to December 18, 1991, by vote of a majority of the stockholders in a Native corporation, additional restrictions on stock alienation can be imposed on Native corporation stock. These additional restrictions could include denial of voting rights to any holder of stock who is not a Native or a descendant of a Native, and the granting to Native corporations a first right to purchase a stockholder's stock prior to transfer to any other party.

#### Merger

ANCSA was amended in 1976 to provide for merger of Native corporations. It permits more shares to be issued to persons who are already shareholders, and it provides for transfer of the village corporations' right to withhold consent for mineral exploration, development and removal to another village organization. It also provides that shareholders who dissent from merger cannot use the statutory remedies in Alaskan law if the merger is effective before December 18, 1991.

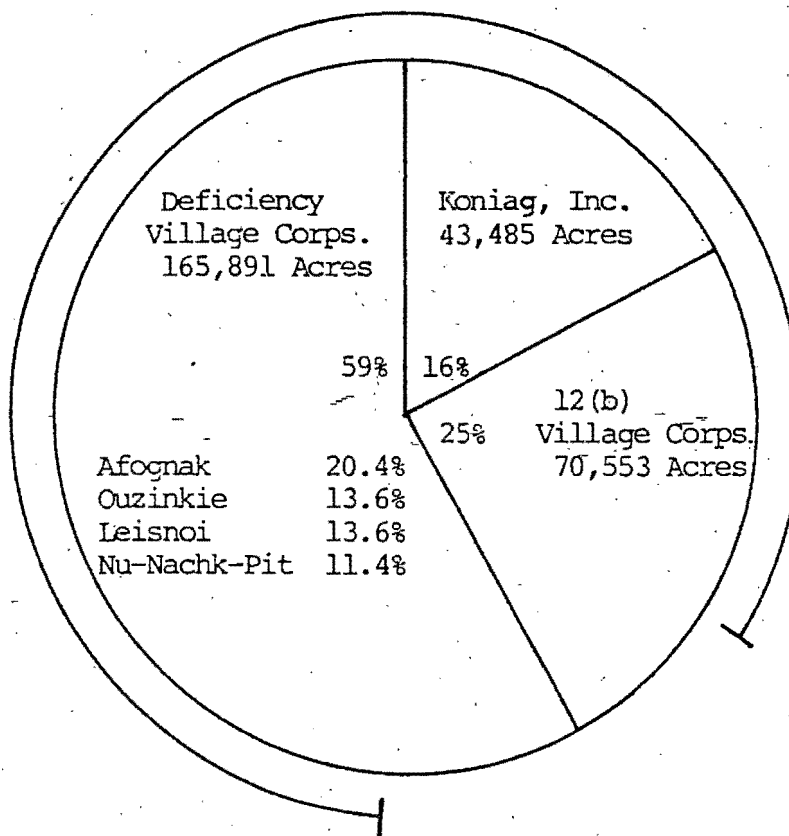
#### K. Afognak Island Land Trade

Pending in the United States Congress as part of the larger Alaska National Interest Lands Legislation (D-2 bill), is the proposed Afognak Island Land Trade (the Koniag Exchange). That proposed land trade is the result of over two years of negotiation by Koniag, Inc. with the United States Department of the Interior, the United States Forest Service, and other interested parties. The proposed land trade is of extreme economic importance to shareholders of Koniag, Inc. and the Koniag village corporations. Its major provisions are described below, and the maps following page 17 show the lands involved.

1. Koniag, Inc. will relinquish its rights to hard rock mineral development on 340,000 acres on the Alaska Peninsula but will retain rights to oil and gas development on those lands.

2. Koniag, Inc. and certain Koniag village corporations will relinquish rights to 340,861 acres of surface estate on the Alaska Peninsula in exchange for 279,929 acres of surface estate on Afognak Island. This surface estate on Afognak Island has significant timber resources.

Koniag and its village corporations must form a joint venture to receive the 279,929 acres on Afognak Island. The percentage ownership of the joint venture by Koniag and the village corporations is described in the following chart.



12(b) Class

Old Harbor	9.3%
Akhiok-Kaguyak	4.08%
Karluk	5.16%
Uganik	.85%
Bells Flats	.75%
Anton Larsen	.88%
Ayakulik	.75%
Litnik	1.02%
Shuyak	1.22%
Uyak	.94%

As the above chart also shows, if merger is approved for all merging village corporations, Koniag, Inc. the surviving corporation, will own 79.94% of the Afognak Island Joint Venture.



The approximate percentage shown on the pie chart for each village identified on the chart as a "12(b) village corporation" is based on the assumption that the Koniag Board of Directors will not designate the four village corporations which are identified in the chart as "deficiency village corporations" also as "12(b) village corporations." If the four "deficiency village corporations" were to be designated also as "12(b) village corporations," the approximate percentage shown on the pie chart for each village corporation listed on the chart as a "12(b) village corporation" would be diluted.

L. Other Mergers

Koniag management has been instructed by the Board of Directors to pursue negotiations for merger with Natives of Kodiak, Inc., Anton Larsen, Inc., Ayakulik, Inc., Bells Flats Natives, Inc., Litnik, Inc., Shuyak, Inc., Uganik Natives, Inc., Uyak Natives, Inc., and Ouzinkie Native Corp. If those negotiations are successful, Koniag and the Boards of Directors of those corporations will present a plan of merger to their respective stockholders for approval.

M. Potential Land Trades

Koniag, Inc., on behalf of the village corporations of Akhiok-Kaguyak, Inc., Karluk Native Corp., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., has discussed potential land trades with the Department of the Interior. Those four village corporations own land within the Kodiak Island National Wildlife Refuge. The U.S. Fish & Wildlife Service has expressed an interest in obtaining some of those lands in exchange for other lands owned by the United States. The negotiations are now in preliminary stages and no agreements have been reached nor have specific lands for trade been identified. Koniag, Inc. intends to continue to pursue these discussions if merger is approved.

N. Leisnoi, Inc.

Leisnoi, Inc. (the village of Woody Island) was certified in 1974 as an eligible Native village under ANCSA. (Under ANCSA, in order for a village to receive land and money conveyances it must be certified as eligible.) Leisnoi, Inc. has received money distributions like other village corporations and has been conveyed some land. Litigation has been filed against Leisnoi, Inc. and Koniag, Inc., challenging the propriety of Leisnoi's certification as an eligible village. So far, Leisnoi, Inc. and Koniag, Inc. have been successful in this litigation and final resolution of the case is expected in the next twelve months. The Justice Department has asked the Secretary of the Interior to look into whether further proceedings concerning Leisnoi, Inc.'s eligibility should be conducted. The Secretary of the Interior has made no decision whether to do so. There is a possibility that as a result of the litigation or action by the Secretary of the Interior that the certification of Leisnoi, Inc. might be reconsidered or reversed. If certification were to be reversed, after merger between Koniag, Inc. and Leisnoi, Inc., Koniag, Inc. would not receive the land entitlements of Leisnoi, Inc. However, former Leisnoi, Inc. shareholders would retain the new stock they received under the merger.

#### O. Information on Directors and Nominees

Four Koniag Director seats will be filled by the shareholders at this annual meeting. The present Board of Directors has nominated four people to fill these seats: Nancy Anderson, Harry Carter, Pete Olsen, and Jacob (Jack) Wick.

##### Nominees

Nancy Anderson, 51, has lived in Kodiak since 1950. Elected to the first permanent Board of Directors of Koniag in 1974, she has served on the Board ever since, attending every scheduled meeting. She also serves on the Finance and Executive Committees, and is on the Board of KISI. Mrs. Anderson is employed as the Secretary of Natives of Kodiak, Inc., of which she is a member and a past President. She has also been active in the Kodiak Area Native Association (KANA), from 1969 to 1979, serving on its Board and several of its committees. Mrs. Anderson founded the Kodiak Chapter of the Alaska Native Sisterhood. Mrs. Anderson has five children; she and her husband, Floyd, fish from their gillnet sites on Ugank Bay every summer.

Harry Carter, 48, is a resident of Anchorage, where he is the Acting Director of Job Corps for the Alaska Federation of Natives (AFN). Mr. Carter was elected to the first permanent Board of Directors of Koniag in 1974, and has served as Vice Chairman of the Board since that time. He has attended every Board meeting in the past year. He has been the Chairman of the Cape Chiniak Impact Center Joint Venture since 1976, and has been a member of the Finance, Search, and Elections Committees of the Koniag Board. He is enrolled to Leisnoi, Inc. Mr. Carter has also been a Commissioner of the Land Use Planning Commission, the Rural Affairs Commission, and the Commercial Fisheries Entry Commission. Mr. Carter was one of the founders of KANA and its first President. He served as Executive Director of AFN during the enactment of ANCSA, and was one of the architects of ANCSA. Mr. Carter is married and has four children.

Pete Olsen, 59, has lived in the Kodiak-Afognak area since 1940. He is a life-long commercial fisherman, and owns his own seiner. He was elected to the Koniag Board for a three-year term in 1976. While on the Koniag Board, he also served as a Director of Kazim and a member of the Personnel Policy Committee. He is enrolled to Afognak Native Corporation, and has served on its Board (and the Board of Natives of Afognak, Inc. before its merger) since 1974. He is presently the President of Afognak Native Corporation. Mr. Olsen is married and he and his wife, Nina, have eight children. He is a veteran, having served in the U.S. Army for three years during World War II.

Jacob (Jack) Wick, 34, lives in Larsen Bay, where he is a commercial fisherman. A member of the Koniag Board of Directors since its formation, he has served as Chairman of the Board from 1973 to the present. Mr. Wick attended 87% of the Koniag Board meetings. He has also served as a Director of KISI and Kazim. Mr. Wick was employed as Koniag's President from 1975 until 1979. He is enrolled to Nu-Nachk-Pit, Inc., which he has served as President and Chairman of the Board. Mr. Wick was also Chairman of the AFN Board for two terms during its reorganization period.

#### Continuing Directors

Karl Armstrong, Perry Eaton, Allen Heitman, Sven Haakanson, Joseph Llanos, Frank Pagano, Allen Panamaroff, Nicholas Pestrikoff, and Frank Peterson will continue to serve on the Koniag Board, as their terms have not expired.

Karl Armstrong, 53, was born in Kodiak. He was one of the five incorporators of Koniag, Inc., and has served on the Board as its Secretary since 1972. He has been a member of the Koniag Management Staff since 1972, currently as Executive Vice President. He is also Vice Chairman of the Cape Chiniak Impact Center Joint Venture. Mr. Armstrong is enrolled to, and the President of, Leisnoi, Inc., which he was instrumental in organizing and incorporating. A member of the Boards of AFN and the Alaska Native Foundation, Mr. Armstrong is also Vice President of the TUNDRA TIMES, and President of the newly-organized Kodiak Chapter of the Alaska Native Brotherhood. Mr. Armstrong's term expires in 1981.

Perry Eaton, 35, is a resident of Anchorage, where he is the Vice President of United Bank Alaska. He has served on the Koniag Board from 1973 to 1977, and from 1978 to the present. He is Koniag, Inc.'s Treasurer, the Chairman of the Finance Committee, and a KISI Board member. Mr. Eaton's father, Henry Eaton, is employed by Koniag as its Director of Economic Development, and the General Manager and a Director of Kazim. Mr. Eaton is enrolled to the Ouzinkie Native Corporation. Mr. Eaton is married and has two children. His term expires in 1981.

Sven Haakanson, Sr., 46, is a resident of Old Harbor, where he is a commercial fisherman, as well as the President of Old Harbor Native Corporation. Mr. Haakanson was one of the five incorporators of Koniag, Inc., and has served on the Board ever since. He is Chairman of the KISI Board. He has also been a Board member of KANA, and a member of the Old Harbor Tribal Council. He and his wife, Mary, have four children. His term expires in 1981.

Allen Heitman, 55, was born and raised in Kodiak, and now lives in Seattle, where he is a Building Engineer for Olympic Savings & Loan. He has served on the Koniag Board from 1973 to 1975, and from 1977 to the present. He organized the Washington-Koniag Native Association, which he served as President in the early and mid-70's. He was also the Manager of the Seattle office of Koniag during enrollment. Mr. Heitman has three children. His term expires in 1982.

Joseph Llanos, 56, lives in Chugiak, where he is the President and owner of Alaska Diversified Contractors, Inc., and AMBUKO/Alaska, Inc. Mr. Llanos was elected to the Koniag Board in 1979 for a three-year term, expiring in 1982. He and his wife are enrolled to Ouzinkie Native Corporation.

Frank Pagano, 56, is married, and he and his wife, Ellen, have three children. Now a resident of Anchorage where he is employed by the FAA as a Civil Rights Specialist, he and his wife are originally from Kodiak and Woody Island. He has served on the Koniag Board since 1976, and has been a member of the Kazim Board as well. Before election to the Koniag Board, Mr. Pagano served for three years on the Board of Leisnoi, Inc. His term expires in 1982.

Allen Panamaroff, 35, is a resident of Karluk, where he is a commercial fisherman, and President of the Karluk Native Corporation. He has been a member of the Koniag Board of Directors since 1973, serving as Treasurer in 1977-78, and as a member of the Finance Committee. He has also served on the Board of KISI, as has his brother, Alex Panamaroff, Jr. Mr. Panamaroff is President of the Karluk Village Council, and Chairman of the Kodiak Area Community Development Corporation. He has been on the Board of KANA for many years. He and his wife, Barbara, have four children. His term expires in 1982.

Nicholas Pestrikoff, 45, is a resident of Ouzinkie, where he is a commercial fisherman. He has been a Board member of Koniag since 1974, and has served on the Finance and Audit Committees. He was a member of the KISI Board and now serves on the Board of Kodiak Swiftsure. Mr. Pestrikoff has also served on the Board of Ouzinkie Native Corporation since 1974. He and his wife, Lilly, have five children. His term expires in 1982.

Frank Peterson, 40, lives in Larsen Bay, where he is the Grant Coordinator for the Tribal Council. Elected to the Koniag Board in 1978, he has served on the Finance and Audit Committees. Mr. Peterson has been the Executive Director and President of KANA, and the Assistant Director for Health Affairs for AFN. He served on the staff of Representative Nick Begich, and staffed the Indian Desk for the Department of Commerce. He is married and has three children. His term expires in 1981.

P. Experts

1. Accountants for the Corporations

Koniag, Inc.	Coopers & Lybrand
Afognak Native Corp.	Touche Ross & Company
Akhiok-Kaguyak, Inc.	Coopers & Lybrand
Karluk Native Corp.	Peat, Marwick & Mitchell
Leisnoi, Inc.	Peat, Marwick & Mitchell
Nu-Nachk-Pit, Inc.	Coopers & Lybrand
Old Harbor Native Corp.	Coopers & Lybrand

Non-audit fees for professional services performed by Coopers and Lybrand for Koniag, Inc. for fiscal year 1980 represented approximately 40% of their aggregate fees. Representatives of Coopers and Lybrand and Touche Ross & Company will be at the meetings and available for questions concerning services they provided.

2. No Independent Evaluation of Merger

No independent third party opinions have been sought concerning the fairness of the terms of the merger, or the relative values of the village corporation shares for which Koniag, Inc. shares are to be exchanged.

No expert opinions on the values of the shares were obtained for several reasons, including the following:

- (a) Management believes that it cannot obtain a consistent and reliable appraisal of the land and natural resources which are a major portion of the corporations' assets, due to the nature of the lands and resources and the lack of market information about them.
- (b) Valuation would require appraisal of more than 800,000 acres of land, at prohibitive cost, just to provide what management believes would be speculative information, and such valuation would require at least three years to conclude.
- (c) The value of corporate stock depends on intangible factors as well as tangible factors. The intangible factors include anticipated future profits, management abilities, prior business performance, and the like. In management's view, given the nature of the corporations involved, these intangible factors are not subject to accurate valuation.



### 3. Tax Consequences of Merger

In the opinion of Duncan, Weinberg & Miller, P.C., counsel for Koniag, Inc., the merger will constitute a reorganization within the meaning of Section 368(a)(1)(A) of the Internal Revenue Code, no gain or loss will be recognized to Koniag, Inc. or any village corporation by virtue of the merger, no gain or loss will be recognized by any village corporation stockholder upon the exchange of stock of a village corporation for that of Koniag, Inc., the tax basis of the Koniag, Inc. stock received by each village corporation stockholder will be the same as the tax basis of the shares of village corporation stock exchanged therefore, and the tax basis and holding period to Koniag, Inc. of the assets it will be acquiring in the merger will be the same as the village corporations' tax basis and holding period for such assets.

As a shareholder, your tax position will not change because of approval of the merger. Money received from the Alaska Native Fund is not taxable, whether you receive it from your village corporation, a new village organization, or Koniag, Inc. No opinion is expressed as to the tax consequences of possible distributions of land by successor organizations.

### 4. Legal Review

This proxy statement and other proxy materials have been reviewed and approved by legal counsel for Koniag, Inc., Duncan, Weinberg & Miller, P.C.

Q. Solicitation of Proxies

In addition to soliciting proxies through this proxy statement, the managements of Koniag, Inc. and the merging village corporations intend to solicit proxies by several other methods. These will include announcements over radio, meetings and discussions with shareholders, letters of explanation, and individual proxy solicitation.

The cost of the various forms of solicitation, including this proxy statement, will be borne by Koniag, Inc., and is estimated at \$125,000.

R. Litigation Affecting Koniag, Inc.

Aleut Corp., et al., v. Arctic Slope Regional Corp., et al., No. A75-53  
Civil, in the U.S. District Court for the District of Alaska.

This case involves litigation among the twelve land-based regional corporations over the interpretation of Section 7(i) of ANCSA. That Section provides that 70% of revenues received by regional corporations from the timber resources and subsurface estate shall be shared among the other regional corporations (except the 13th Regional Corporation) on the basis of enrollment to the regional corporations. The litigation involves disputes over whether almost \$14 million received by one regional corporation (Arctic Slope Regional Corp.) should be subject to the sharing requirements of Section 7(i) and, in addition, involves claims of several regional corporations for over several million dollars of expenses which those regional corporations seek to deduct from revenue received prior to sharing the net amount with other regional corporations. The outcome of this litigation will have an effect on how much money Koniag, Inc. is required to distribute to other regional corporations, as well as how much money Koniag, Inc. is entitled to receive from the other regional corporations, 50% of which must be distributed to village corporations and Class B shareholders.

Ukpeagvik Inupiat Corp., v. Arctic Slope Regional Corp., No. F80-12, in  
the U.S. District Court for the District of Alaska.

The village corporation for the village of Barrow (Ukpeagvik Inupiat Corp.) is suing Arctic Slope Regional Corp. demanding that Arctic Slope distribute certain funds to the Barrow Village Corporation under Section 7(j) of ANCSA. That section requires a regional corporation to distribute money to village corporations and at-large shareholders under a certain formula. Koniag, Inc. has taken the same position concerning distribution of those funds as has the defendant in this case, Arctic Slope Regional Corp. The resolution of this case may affect Koniag, Inc.'s distribution policies under Section 7(j). Therefore, Koniag, Inc. is contemplating entering the case as a party or as a friend of the court to explain Koniag's position on such distributions.

Jackson & Fenton v. United States of America, et al., Case No. 80-3141,  
and Paul v. Andrus, Case No. 77-3373, in the United States Court of  
Appeals for the Ninth Circuit.

In this case, certain lawyers, Barry Jackson, Thomas Fenton, and Frederick Paul, have sued the United States, all regional corporations, and other parties claiming they are entitled to compensation from the Alaska Native Fund, for work they allegedly performed in achieving passage of ANCSA. If these lawyers prevail, the amount of money distributed from the Alaska Native Fund to regional corporations would be reduced. So far the plaintiffs have been unsuccessful in their claims and their cases are now before the United States Court of Appeals for the Ninth Circuit.

## S. Descriptions of the Corporations

For a complete account of the business activities of Koniag, Inc., and its subsidiaries, please see the Koniag, Inc. Annual Report.

### Jointly-Owned Businesses

Koniag, Inc. and the merging village corporations jointly own portions of two businesses, Kodiak Island Seafoods, Inc. (hereafter "KISI"), and the Cape Chiniak Joint Venture.

KISI operates a large cannery, fishing vessels, and a store in Larsen Bay. Ownership is as follows:

	<u>Shares</u>	<u>Percentage</u>
Koniag, Inc.	234,000	23.54%
Leisnoi, Inc.	100,000	10.06%
Nu-Nachk-Pit, Inc.	230,000	23.14%
Old Harbor Native Corp.	230,000	23.14%
Karluk Native Corp.	200,000	20.12%

The company has experienced operating losses in the past. (See Appendix B). Although a small profit is anticipated in fiscal year 1981, management has determined that if the cannery plant continues operation under current conditions, it will lose additional money in fiscal year 1982 and thereafter. An alternative custom canning proposal is being considered to reduce these losses. Management is also investigating a sale of the facility or a joint venture. If all four of the above-listed merging village corporations approve merger, KISI will be wholly-owned by Koniag, Inc.

The Cape Chiniak Impact Center Joint Venture was formed by Koniag, Inc., all of the village corporations in the Koniag Region, Natives of Kodiak, Inc., and the uncertified village corporations (whose interests are contingent on certification). The purpose of the joint venture is to develop the Cape Chiniak Impact Center, formerly a U.S. Air Force tracking station. While legal title to the site is held by Leisnoi, Inc., equitable title is held by the Joint Venture. Initially, plans called for use of the site as a base for off-shore drilling operations. Thereafter, the property was to be used as a Job Corps Center. The lease agreement for the Job Corps Center terminated September 30, 1980. Management is pursuing other uses for the property, including sale, and will continue to do so if merger is approved.

AFOGNAK NATIVE CORPORATION  
514 Shareholders

Afognak Native Corporation is the result of a merger between Natives of Afognak, Inc. and Port Lions Native Corporation. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Afognak Native Corp. is entitled to conveyance of 230,400 acres under ANCSA, of which it has received 137,713.83 acres on Kodiak and Afognak Islands, and 48,165 acres on the Alaska Peninsula. If the Afognak Island Land Trade becomes law, Afognak's lands and land entitlements on the Alaska Peninsula will be traded for its share in the Afognak Island Lands Joint Venture. Much of Afognak Native Corp. land has commercially valuable timber. Recently, in connection with general corporate planning, corporation management has retained Mr. Joe Bobb, of Joe Bobb Enterprises of Eugene, Oregon, to perform a timber cruise of all the corporation's timber. This cruise is not yet complete. Management has no other reliable valuations of corporate property. Corporation lands also have important recreational uses (deer and elk hunting).

Businesses

The corporation sold timber rights on approximately 1,200 acres of its land on Afognak Island and has received payments for those rights totaling \$2,226,387. The timber sale contract has expired and no further payments will be received.

The corporation sold the assets of Northern Lights Seafood, Inc. in June 1980, and incurred a loss on disposal of \$142,279. The corporation sold the assets of Island Air Service, Inc., in September 1980, and will incur an estimated loss on disposal of \$35,406.

Investments

The corporation owns an interest in the Cape Chiniak Joint Venture (described above). As of June 30, 1980, the corporation has \$2,977,767 in liquid investments, including \$1,177,060 in Alaska Native Funds to be distributed if merger is approved.

14(c) Claimants

Certain persons have requested conveyance of certain corporation lands under Section 14(c) (1) of ANCSA, and the corporation is considering those requests.

AKHIOK-KAGUYAK, INC.  
147 Shareholders

Akhiok-Kaguyak, Inc. resulted from the merger of Kaguyak, Inc. and Natives of Akhiok, Inc. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Entitled to 138,240 acres under ANCSA, the corporation has received 63,358 acres. No attempt has been made to value the land received, which lies within the Kodiak National Wildlife Refuge, and is therefore restricted in use. The corporation lands include shoreline along important fishing waters, and land with significant recreational value (bear hunting). As a result of a survey conducted recently by the Bureau of Land Management, the location of lands which Akhiok-Kaguyak, Inc. is entitled to select may change.

Businesses

None.

Investments

The corporation owns a portion of the Cape Chiniak Joint Venture (see description above). As of June 30, 1980, the corporation had \$777,713 in liquid investments, including \$336,630 in Alaska Native Funds to be distributed if merger is approved.

14(c) Claimants

Certain persons have requested conveyance of set net sites on corporate property under Section 14(c) (1) of ANCSA, and the corporation has rejected those requests. There is a possibility of further litigation on the issue.

Afognak Island Land Trade

If the Afognak Island Land Trade becomes law and the Afognak Island Lands Joint Venture is established, the corporation will own a share of that joint venture.

KARLUK NATIVE CORPORATION  
186 Shareholders

Karluk Native Corporation is the village corporation for Karluk. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Entitled to 92,160 acres under ANCSA, the corporation has received 83,767 acres, some of which lies within the Kodiak National Wildlife Refuge, and is therefore restricted in use. No attempt has been made to value the land, which includes shoreline along important commercial fishing areas, and along Karluk Lagoon and the Karluk River, important recreational areas.

Businesses

None.

Investments

The corporation owns 20.12% of KISI and a portion of the Cape Chiniak Impact Center Joint Venture (see descriptions above). As of June 30, 1980, the corporation had \$723,030 in liquid investments, including \$425,940 in Alaska Native Funds to be distributed if merger is approved.

Afognak Island Land Trade

If the Afognak Island Land Trade becomes law and the Afognak Island Lands Joint Venture is established, the corporation will own a share of that joint venture.

LEISNOI, INC.  
296 Shareholders

Leisnoi, Inc. is the the village corporation for the village of Woody Island. The certification of Woody Island as a village under ANCSA is being challenged in federal court. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Leisnoi, Inc. is entitled to receive 115,200 acres under ANCSA, and of that amount 3,394 acres have been conveyed. Selected lands include property close to the city of Kodiak along the Kodiak road system, and on Woody Island and Long Island. No attempt has been made to place a value on the corporation's lands. The property conveyed is the Cape Chiniak Impact Center, to which Leisnoi, Inc. holds legal title and the Cape Chiniak Joint Venture holds equitable title.

Businesses

Leisnoi owns 75% of Land Surveying Services, Inc., a corporation based in Kodiak, Alaska. This corporation has conducted no significant business since its inception.

Investments

Leisnoi, Inc. owns 10.06% of KISI, and a share of the Cape Chiniak Impact Center Joint Venture (see descriptions above).

Leisnoi, through its wholly-owned subsidiary, WUF-1, has also joined with wholly-owned subsidiaries of Ouzinkie Native Corporation, Natives of Kodiak, Inc., and Yak-Tat-Kwan, Inc. (Yakutat) in a joint venture, Koncor Forest Resource Management Company. The venture agreement provides for the venturers to contribute assignments of timber rights on certain specified lands. By December 31, 1979, Yak-Tat-Kwan, Inc., Natives of Kodiak, Inc., and Ouzinkie Native Corp. had assigned timber rights to the joint venture which the venturers have agreed to value at \$190,800,000 (\$3,000 per acre). To date, Leisnoi has not received title to any lands specified in the joint venture, to be assigned to Koncor, which include land on Kodiak, Woody and Long Islands. It has, however, recognized a portion of the venture's losses.

As of June 30, 1980, Leisnoi also has \$775,044 in liquid investments, including \$677,840 in Alaska Native Funds to be distributed if merger is approved.



Afognak Island Land Trade

If the Afognak Island Land Trade becomes law and the Afognak Island Lands Joint Venture is established, the corporation will own a share of the joint venture.

NU-NACHK-PIT, INC.  
203 Shareholders

Nu-Nachk-Pit, Inc. is the village corporation for the village of Larsen Bay. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Entitled to 115,200 acres, the corporation has received 72,144.27 acres under ANCSA thus far. No attempt has been made to place a value on these lands, which lie within the Kodiak National Wildlife Refuge, and therefore are restricted in use. The corporation's lands extend along the shores of Uyak Bay, an important commercial fishing area, and along part of the Karluk River and Karluk Lake, a major recreational resource.

Businesses

None.

Investments

Nu-Nachk-Pit, Inc. has invested in two business ventures: the Cape Chiniak Impact Center Joint Venture, and KISI. The corporation owns a portion of the Cape Chiniak Joint Venture, and 23.14% of KISI. KISI's cannery and store are located in Larsen Bay.

As of June 30, 1980, Nu-Nachk-Pit, Inc. has \$787,882 in liquid assets, including \$464,870 in Alaska Native Funds to be distributed if merger is approved.

Afognak Island Land Trade

If the Afognak Island Land Trade becomes law and the Afognak Island Lands Joint Venture is established, the corporation will own a share of that joint venture.

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OLD HARBOR NATIVE CORPORATION  
335 Shareholders

Old Harbor Native Corporation is the village corporation for the village of Old Harbor. This is general information on some aspects of the corporation; please see the attached financial information as well.

Lands

Entitled to 115,200 acres of land under ANCSA, the corporation has received 102,008.29 acres, including much of Sitkalidak Island. No attempt has been made to place a value on the land, which includes shoreline on waters important for commercial fisheries, and potential grazing areas. Portions of the land received lie within the Kodiak National Wildlife Refuge, and are therefore restricted in use.

Businesses

None.

Investments

The corporation owns a portion of the Cape Chiniak Impact Center Joint Venture and 23.14% of KISI (see descriptions above). As of June 30, 1980, the corporation had \$1,254,233 in liquid investments, including \$767,150 in Alaska Native Funds to be distributed if merger is approved.

Contracts and Obligations

The corporation contracted for a feasibility study for a proposed processing plant in Old Harbor. The corporation has been billed for \$308,004.97 in connection with the study; the corporation has paid \$157,322.28, and the amount owed is in dispute.

Afognak Island Land Trade

If the Afognak Island Land Trade becomes law and the Afognak Island Lands Joint Venture is established, the corporation will own a share of that joint venture.

## PLAN OF MERGER

Koniag, Inc., a regional corporation organized under the laws of Alaska, pursuant to the Alaska Native Claims Settlement Act, § 7, 43 U.S.C. 1606, and Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., village corporations organized under the laws of Alaska, pursuant to the Alaska Native Claims Settlement Act, § 8, 43 U.S.C. 1607, agree to the following Plan of Merger.

### ARTICLE I

#### CORPORATION NAMES

The names of the merging corporations are Koniag, Inc., and Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., and the name of the surviving corporation after merger shall be Koniag, Inc.

### ARTICLE II

#### TERMS AND CONDITIONS

Merger shall take place under the following terms and conditions:

1. Effective date.

The effective date of this merger shall be the date when the State of Alaska issues a Certificate of Merger, after filing of the Articles of Merger, as required by AS 10.05.402. At that time, Koniag,

Inc. and Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., will merge into Koniag, Inc., and their separate corporate existences will cease.

2. Assets and liabilities.

Koniag, Inc., on the effective date of merger, shall by operation of law have all the rights, privileges and immunities, including rights and benefits granted under the Alaska Native Claims Settlement Act, of the merging corporations. All property, of whatever type, except that set out below in Section 3, and all other interests of the merging corporations shall be deemed transferred to Koniag, Inc., the surviving corporation, on the effective date. Koniag, Inc. will also on that date assume all the legal liabilities, obligations and responsibilities, disclosed or undisclosed, known or unknown, contingent or otherwise, of the merging corporations.

3. Property reserved by Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp.

Before the effective date of this merger, Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., will transfer either to each's IRA council, formed under the Indian Reorganization Act, 25 U.S.C. 1461, et seq., or to another successor organization, at its option, a portion of money received after June 30, 1980 from the Alaska

Native Fund, and the surface estate in fee in land not to exceed 5,140 acres for Afognak Native Corp.; 1,470 acres for Akhiok-Kaguyak, Inc., 1,860 for Karluk Native Corp., 2,960 acres for Leisnoi, Inc.; 2,030 acres for Nu-Nachk-Pit, Inc., and 3,350 acres for Old Harbor Native Corp. This land shall be selected by Afognak Native Corp., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., with the advice and assistance of Koniag, Inc. Should these transfers not be complete by the effective date, Koniag, Inc., the surviving corporation, shall complete the transfers as quickly as possible, and in the interim segregate the money or property to be transferred. Each village corporation's successor organizations shall be formed before or as soon as possible after merger.

4. Distribution of Alaska Native Fund money.

Immediately after the effective date of merger, Koniag, Inc., the surviving corporation, will distribute to the former shareholders of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., Alaska Native Fund money held by Koniag, Inc., in trust, with the remaining portion retained by the successor village organization as described in Section 3 above.

<u>Corporation</u>	<u>Direct Distribution to Shareholders</u>	<u>Amount Retained by New Village Organization*</u>
Afognak Native Corporation	\$2,100/100 shares	\$98,040
Akhiok-Kaguyak, Inc.	\$2,100/100 shares	\$27,930
Karluk Native Corporation	\$2,100/10 shares**	\$35,340
Leisnoi, Inc.	\$2,100/10 shares**	\$56,240
Nu-Nachk-Pit, Inc.	\$2,100/10 shares**	\$38,570
Old Harbor Native Corporation	\$2,100/100 shares	\$63,650

\*Calculated at \$190 per enrollee.

\*\*These corporations only authorized ten shares per original shareholder rather than 100.

#### 5. Consent to mineral exploration and development.

Prior to the effective date of merger, Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp. will also transfer to their successor organizations their right under Section 14(f), Alaska Native Claims Settlement Act, 43 U.S.C. 1613(f), to withhold consent to mineral exploration, development or removal within the boundaries of the Native villages of Woody Island and Larsen Bay. For this purpose, the boundaries of the Native village shall be the boundaries of the land transferred under Section 3 above. The successor organizations to Afognak Native Corp. and Akhiok-Kaguyak, Inc. will have the right to reasonably withhold consent to mineral exploration, development or removal within the boundaries of the land transferred to them under Section 3 above. The existing 14(f) rights of

the successor organizations to Natives of Afognak, Inc., Port Lions, Inc., Natives of Akhiok and Kaguyak, Inc., are hereby recognized. Should said transfer not be complete on the effective date, Koniag, Inc., the surviving corporation, will complete the transfer as quickly as possible and in the interim will not conduct or consent to mineral exploration, development or removal within the villages' boundaries.

6. Articles of Incorporation and Bylaws.

As of the effective date, the Articles of Incorporation and the Bylaws of Koniag, Inc., the surviving corporation, shall be those of Koniag, Inc., with the amendments set out in Article IV, below.

7. Directors.

The initial directors of Koniag, Inc., the surviving corporation, on the effective date, shall be those persons who were directors of Koniag, Inc.

8. Approval by the Board of Directors and Shareholders.

Filing the Articles of Merger is conditioned on approval of this Plan of Merger by the Boards of Directors of Koniag, Inc. and Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., by resolution adopted by each board, and by the shareholders of each merging corporation, at an annual or special meeting of the shareholders, properly convened and held for the purpose of voting on approval of this plan, or for other proper purposes. The plan will be considered approved if the holders of a majority of the outstanding shares of each corporation vote for its approval.



### ARTICLE III

#### CONVERSION OF SHARES

Shares of stock in Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., and Koniag, Inc. shall be converted into shares of Koniag, Inc., the surviving corporation, as follows:

Stock in Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., corporations:

1. On the effective date of merger, each share of Afognak Native Corp. stock, Akhiok-Kaguyak, Inc. stock, and Old Harbor Native Corp. stock then issued and outstanding shall be converted automatically into one share of Class B stock in Koniag, Inc., the surviving corporation. Each outstanding certificate which represents a number of shares of stock in Afognak Native Corp., Akhiok-Kaguyak, Inc., or Old Harbor Native Corp., shall, on the effective date, be deemed to represent that number of Class B shares of stock in Koniag, Inc., the surviving corporation. On the effective date of merger, each share of Karluk Native Corp., Leisnoi, Inc. and Nu-Nachk-Pit, Inc. stock then issued and outstanding shall be converted automatically into ten shares of Class B stock in Koniag, Inc., the surviving corporation. Each outstanding certificate which represents a number of shares of stock in Karluk Native Corp., Leisnoi, Inc. or Nu-Nachk-Pit, Inc., shall, on the effective date, be deemed to represent ten times that number of Class B shares of stock in

Koniag, Inc., the surviving corporation. The surviving corporation shall thereafter issue new certificates representing such shares.

Holders of such Class B stock shall receive distributions under 7(m) of the Alaska Native Claims Settlement Act on the same basis as at-large shareholders who hold Class B stock prior to merger. Nothing in this Plan of Merger prejudices or alters the rights or privileges of Class B stock in Koniag, Inc., the merging corporation.

Stock in Koniag, Inc.

2. All Class A and Class B shares of stock in Koniag, Inc., then issued and outstanding, on the effective date of merger, shall be automatically converted into Class A and Class B shares of stock of Koniag, Inc., the surviving corporation.

#### ARTICLE IV

#### CHANGES IN ARTICLES OF INCORPORATION

The changes in the Articles of Incorporation of the surviving corporation caused by the merger shall be as follows.

Article III, Purposes and Powers, shall be amended by adding a new Section C:

To act as a corporation resulting from the merger of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., Old Harbor Native Corp., and Koniag, Inc., pursuant to the Alaska Native Claims Settlement Act, § 30(a) and the Alaska Business Corporation Act, AS 10.05.375 et seq.

Article VII shall be amended by:

1. Deleting the fourth paragraph in its entirety, and substituting the following:

Class B shares shall be issued to those Natives who are enrolled pursuant to the Act in the Koniag, Inc. Regional Native Corporation of Alaska, but who are not enrolled in any certified village corporation in the region, including those Natives entitled to stock because of merger of Koniag, Inc. with a village corporation.

2. Deleting the sixth paragraph in its entirety and substituting the following:

Whenever funds are distributed under Section 7(j) of the Alaska Native Claims Settlement Act to shareholders in village corporations in the Koniag, Inc. Region, Class B shares shall be entitled to receive dividends, the amount of which shall bear the same ratio to the amount distributed among the village corporations that the number of outstanding shares of Class B stock bears to the number of outstanding shares of Class A stock held by shareholders who are also shareholders in a certified village corporation at the time of the dividend; provided, however, that an equitable portion of the amount distributed as dividends to Class B shareholders may be withheld by this corporation and combined with village corporation funds to finance projects that will benefit the region generally.

## ARTICLE V

### ACTIONS TAKEN PRIOR TO MERGER

1. The Boards of Directors of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp., and the Board of Directors of Koniag, Inc. will recommend to their respective shareholders that they consider and approve the terms of this Plan of Merger, and authorize the transactions it describes.

2. Material change in position.

Between the date this Plan of Merger is approved by the Boards of Directors of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., or Old Harbor Native Corp., and the effective date of merger, they shall not take any corporate action which would materially change the financial positions of the corporations from their position on the date of approval by the Board of Directors, except the following: transfers of Alaska Native Fund moneys and land as specified in Article II, Section 3 above; dividends required to be paid under the Alaska Native Claims Settlement Act; transactions in the ordinary course of business; or actions taken with the consent of Koniag, Inc. Between the date this Plan of Merger is approved by the Board of Directors of Koniag, Inc. and the effective date of merger, Koniag, Inc. will not take any corporate action which would materially change the financial position of the corporation from its position on the date of approval of the plan by the Board, except the following:

transactions in the ordinary course of business; actions required under the Alaska Native Claims Settlement Act; or actions taken with the consent of Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., and Old Harbor Native Corp.

### 3. Abandonment.

This Plan of Merger, and the obligations therein, shall be deemed abandoned automatically upon any of the following events: disapproval of the plan by the Board of Directors of Koniag, Inc.; or the plan's failure to win approval by the holders of a majority of stock in either Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., Old Harbor Native Corp., or Koniag, Inc. at their respective shareholders meetings. In the event one or more village corporations disapprove the plan, either by shareholder or Board of Directors vote, it shall remain in effect as to the other corporations. In addition, if the conditions of Section 2 above are not complied with by a merging corporation, or if any other event occurs which so materially changes the financial position of a merging corporation, the other merging corporations may, by resolution of their Boards of Directors, abandon the plan as to them at any time up to the filing of the Articles of Merger.

### 4. Documents.

Afognak Native Corp., Akhiok-Kaguyak, Inc., Karluk Native Corp., Leisnoi, Inc., Nu-Nachk-Pit, Inc., Old Harbor Native Corp., and Koniag, Inc. agree to execute and deliver such documents, and to take

such other action, as is considered necessary by Koniag, Inc., the surviving corporation, to carry out transfer of title or possession of all property, rights, privileges and powers except those set out in Section 3, Article II, to the surviving corporation, and to carry out the intent of this Plan of Merger.

DATED:

October 3, 1980

*Thomas*  
President, Koniag, Inc.

DATED:

Oct 6, 1980

*Pete G. Olsen*  
President, Afognak Native Corp.

DATED:

Oct. 10, 1980

*Andy Kahnt*  
President, Akhiok-Kaguyak, Inc.

DATED:

Oct. 4, 1980

*Wes Panemaro*  
President, Karluk Native Corp.

DATED:

Oct 3, 1980

*Paul Armstrong*  
President, Leisnoi, Inc.

DATED:

OCT 8, 1980

*Charles Christen*  
President, Nu-Nachk-Pit, Inc.

DATED:

Oct 4, 1980

*Sam Anderson*  
President, Old Harbor Native Corp.

# RICKETTS & ASSOCIATES

9340 West Parkview Terrace

Eagle River, Alaska 99577

Phone: 907-696-0655/694-8900 Fax: 907-694-8901

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Ms. Debbie Segelhorst  
Director, Office of Awards  
Alaska Area Office  
250 Gambell Street  
Anchorage, AK 99501

December 17, 1996

Dear Debbie:

It is with much regret and consternation that I feel compelled to write to you to report some highly unusual and possible improprieties of missuse of Federal Government funds by the Karluk I.R.A. Council.

As you know Debbie, I have had the wonderful opportunity of working for you and with you, for three and one-half years up through May of 1991. Subsequently to that, I have been working with tribes throughout Alaska and the "lower 48" in assisting them to assume various programs, functions and projects previously managed by either IHS, BIA or the non-profits. During the last few years I have taken great pleasure and pride in assisting tribe's to set up their respective management systems, learn the basic "rules to the game" and go forward in exercising their respective self-determinative authority by assuming "638" contracts from IHS or BIA.

Like with other tribes, I assisted Karluk I.R.A. council prepare their "638" contract proposal, developed a template of management systems for them, assisted them during contract negotiations besides providing numerous hours of consultative technical support. After a tribe receives its contract award I then plan for two trips on-site to the village to work with the tribal council in going through their management systems template page by page, normally after two days onsite each visit, along with getting "638" training, going through their contract, etc., the tribal council is able to complete review and development of their management systems whereby they finally become their own and not a template. However, after being weathered in at Kodiak twice (Tess for 4 days and I for 2), without getting to Karluk, I finally made it on the third try. During my stay in Kodiak where I met with their "financial consultant" (Walter Sapp) and my two days in the village, I became aware of the following potential financial improprieties or discrepancies which I feel warrants an on-site program and financial audit of their operations.

KARLUK L.R.A. LETTER, DECEMBER 17, 1996PAGE 2

1. While in Karluk, the tribal council only met with me for about an hour, there was no time to go through the management systems nor for them to receive any G38 training, therefore it is my opinion that the tribal council has no idea of the laws and regulations affecting their use of federal funds, nor do they have any idea of what those policies and procedures reflect;
2. Mr. Sapp indicated to me that the tribal president and her mother spent over or close to \$44,000 just for travel during FY/95;
3. Mr. Sapp is receiving (in May of 1996) approximately \$1,800/mo. to process about 20-30 checks/mo., and he prepares all financial information and monthly reports in Kodiak;
4. The auditing firm who did their FY/95 audit, were friends and acquaintances of Mr. Sapp, and the audit was conducted only in Kodiak, the auditors never visited the village to review their books, protocols, etc. they were given an "unqualified audit opinion" even though the tribe had no management systems or controls in place for the year of that audit;
5. Just recently I was informed by another reliable source, that contrary to your recommendation, the entire tribal council attended a "board retreat" in Hawaii during the week of the BIA Provider's Conference (this is an excellent conference for tribes to learn how to conduct business).

What prompted this letter are two reasons: First, because I firmly believe we all must closely monitor each other to minimize a tribe from "willfully misapplying" federal funds because, if not, this activity could have an extensive, negative impact on the rest of the Native community; and, Second, two older tribal members approached me to ask that I write this letter for they are concerned for the welfare and reputation of the Tribe and the rest of the Tribal membership.

In closing I feel your office needs to expeditiously investigate these concerns as soon as conveniently possible to do. I wish you all well, and I am most---

Sincerely Yours,



Gary F. Ricketts  
CEO/President

cc: Ms. Peggy Akagi, BIA Contracting Officer  
Mr. Marlan Knight, Director, HUD Indian Housing Programs  
Mr. Kelly Simeonoff, President Kodiak Area Native Association

BREUD



**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

JORI Lynn Benton  
( Print Name )

Jori Lynn Benton  
( Sign Name )

03-23-01  
( Date )

*I am not willing to Sell or lease -  
Thank you!!*

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Nick N. Chaeliga  
( Print Name )

Nick N. Chaeliga  
( Sign Name )

3-24-2001  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Constance E. Chya  
(Print Name)

Constance E. Chya  
(Sign Name)

03-24-01  
(Date)

The 1860 acres belong to the  
Karluk membership - (186 original  
members.)

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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Paul Wayne Chya JR.  
(Print Name)

Paul Wayne Chya JR.      03-23-01  
(Sign Name)                      (Date)

The LANDS Belong TO The KARLUK membership  
Residing in and outside of KARLUK. Thanks.

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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Robin E. Chya  
( Print Name )

Robin E. Chya  
( Sign Name )

03-23-01  
( Date )

The 1860 acres Belong TO us All. Do NOT Sell.

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Michelle Ann Holmes  
( Print Name )

Michelle Ann Holmes  
( Sign Name )

03-24-01  
( Date )

*This decision is up to the full membership - not a ~~few~~ <sup>few!!</sup>*

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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SHAWNOR R Knowles  
( Print Name )

Shawnor R Knowles  
( Sign Name )

3-26-01  
( Date )

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

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HAZEL ANN MAULTIN  
(Print Name)

Hazel Ann Maultin  
(Sign Name)

3-24-01  
(Date)

I CANNOT understand why I am not counted  
in Karluk - I being born & raised there -  
feel very put out - finding out I could not  
register in Karluk.  
I believe that those Chavli Maultin's (village)  
should be checked into and come to a decision on  
getting us all enrolled to our birth right that  
we have in Karluk. Perhaps a workover on the IKA rego.  
Hazel Maultin



**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Helen Malutin  
( Print Name )

Helen Malutin  
( Sign Name )

3-24-01  
( Date )

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Alexander Panamort  
( Print Name )

Alexander Panamort  
( Sign Name )

3-26-01  
( Date )

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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Alex Panamartoff Jr

( Print Name )

Alex Panamartoff Jr

( Sign Name )

03-26-01

( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that**  
**I do not want EVOS or anyone else to purchase or permanently acquire** <sup>or</sup>  
**our 1,860 acres of land.** <sub>lease</sub>

Arthur PANAMAROFF  
Print Name

Arthur Panamaroff  
Sign Name

3-24-2001  
Date

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that  
I do not want EVOS or anyone else to purchase or permanently acquire <sup>or</sup>  
our 1,860 acres of land. lease**

FRIEDA I. PANAMAROFF  
Print Name

Frieda I. Panamaroff  
Sign Name

3-24-2001  
Date

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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Mable J. Panamaroff  
( Print Name )

Mable J. Panamaroff      3-26-01  
( Sign Name )                      ( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that**  
**I do not want EVOS or anyone else to purchase or permanently acquire** *or*  
**our 1,860 acres of land.** *Lease*

Sharon Marie Panameroff Hochmuth  
**Print Name**

Sharon Panameroff Hochmuth  
**Sign Name**

3-24-01  
**Date**

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

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Sandra L. VINBERG  
( Print Name )

Sandra L. Vinberg 3-24-01  
( Sign Name ) ( Date)

I am not a willing seller of  
my 10 acres of land in Karluk. ✓



**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.**

Edna M. Vinberg  
Print Name

Edna M. Vinberg  
Sign Name

3/15/01  
Date

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.**

*Donald Jay Vinberg*  
Print Name

*D. J. Vinberg*  
Sign Name

*3-26-01*  
Date

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Theodore Squartseff  
( Print Name )

Theodore Squartseff  
( Sign Name )

3-26-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Mary Ann Holmes  
( Print Name )

Mary Ann Holmes  
( Sign Name )

3-27-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Darryl Squartsoff  
( Print Name )

Darryl Squartsoff  
( Sign Name )

3-24-01  
( Date )

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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ELI SQUARTSOFF  
( Print Name )

Eli Squartsoff  
( Sign Name )

03/26/01  
( Date )

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Tim Shugak

Tim Shugak 3/21/01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Peter Shugak

Peter Shugak

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL



Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

MARIE BENSON      Marie Benson

3-22-01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED  
MAR 27 2001  
EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Nick Sugak

Nick Sugak 3-22-01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 22 2001

Ms McCammon,

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Signed,  
Thelma May Hamilton

  
March 20, 2001

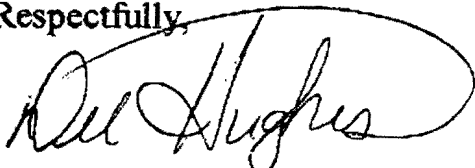
March 26, 2001

Molly McCammon, Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G. Street Suite #401  
Anchorage, Alaska 99501  
Fax 907 276-7178

Ms. McCammon,

I am a member of the Village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1860 acres of land. It is my wish that you listen to the enrolled members of the Village of Karluk, and do not participate in any negotiations concerning our land.

Respectfully,

A handwritten signature in cursive script, appearing to read "Dee Hughes", enclosed within a large, loopy oval flourish.

Dee Hughes, Village of Karluk Member

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 23 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Philip B. Mc Cormick

Philip B. Mc Cormick 3-21-~~00~~01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 23 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Chuck Reft

Chuck Reft 3-21-01



Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 23 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

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Barbara Reft

Barbara Reft 3-21-01

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.**

KIMBERLY ANN HOLMES  
Print Name

Kimberly Ann Holmes  
Sign Name

03-23-01  
Date



March 30, 2001

E.V.O.S.  
645 G. Street, Suite 401  
Anchorage, Alaska 99605

Dear Sirs:

As a former shareholder of the Karluk Native Corporation, you are duly advised that I personally own 10 acres of land in Karluk, which is currently under consideration for purchase by your organization.

I do not know your motivation for wanting to purchase my 10 acres of land, nor do I care; but be advised that I have not authorized this sale to you by the Karluk Tribal Council, nor have I offered my 10 acres of land for purchase by you. Further be advised, that at best, you have been dealing with a renegade tribal organization which has for years wrongfully declared to you that they own my 10 acres of land in the Karluk area. I warn you now that they do not, that they never have, and that they never will own my 10 acres of land, and for your organization to attempt to purchase my property would only transfer title from one thief to another!

It would behoove your organization (of which I hope you will reveal, that you possess the utmost fair play practices) to immediately terminate your unfortunate negotiations with the Karluk Tribal Council to purchase my property.

Lastly, please take no solace in the fact that the majority of former shareholders of the Karluk Native Corporation have been widely dispersed since the transfer of title by Koniag, Inc. The fact that we former shareholders have had to deal with such appalling character of the Tribal Council has made it impossible for us to conclude our claim with the council. However, I can assure you that all other 185 former shareholders continue to OWN their 10 acre parcels of land like myself. *Irregardless of what the Karluk Tribal Council claims, our 10 acre parcels remain "In Trust" by them until such time we can successfully conclude the transfer of title to each former shareholder, NOT THE E.V.O.S.!*

Sincerely,



Albert A. Reft  
3009 Sea Gull Lane  
Stockton, California 95219  
(209) 952-8378  
Fax: (209) 466-5986

Copy to:  
Koniag, Inc.  
Chuck Reft

RECEIVED

APR 02 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

John H. Reft  
( Print Name )

John H. Reft  
( Sign Name )

3 - 2 - 2001  
( Date )

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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Nicholas M. REFT  
(Print Name)

Nicholas M. Reft  
(Sign Name)

04-02-01  
(Date)

The LANDS involved came about due to the KARLUK - 186 ORIGINAL Shareholders. These lands were put under the KARLUK Council for Protection for the members - under a LAND Committee. Due to power play, greed etc. by the KARLUK IRA - They DO NOT recognize the Karluk members including myself - I was born and raised in KARLUK. This SALE cannot go thru unless it is put up to the vote of the original membership - Any other way is invalid - Please reconsider. This is an injustice.  
NICHOLAS M. REFT

APR-02-01 MON 09:55 AM LCMF  
Apr 02 01 08:41a David Waselie  
MAR-30-01 FRI 02:33 PM LCMF

FAX NO. 9072731831  
907-279-8081

P. 01  
p.2

Post-it* Fax Note	7671	Date	4-2-01	# of pages	2
To	Molly McCammon	From			
Co./Dept.	EVOS	Co.			
Phone #	278-8012	Phone #			
Fax #	276-7178	Fax #			

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

Tina Waselie  
(Print Name)

Tina Waselie  
(Sign Name)

3-30-01  
(Date)

Received Time Mar.29. 10:51AM

APR-02-01 MON 09:55 AM LCMF  
Apr 02 01 08:42a David Waselie  
MAR-30-01 FRI 02:33 PM LCMF

FAX NO. 9072731831  
907-279-8081  
FAX NO. 9072731831

P. 02  
p.3

P. 06

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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David W. Waselie  
(Print Name)

David Waselie  
(Sign Name)

3-30-01  
(Date)

Received Time Mar.29. 10:51AM

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

James Panamareff  
(Print Name)

James Panamareff  
(Sign Name)

3-31-01  
(Date)

Post-It® Fax Note	7671	Date	4-2-01	# of pages	2
To	Molly McCammon	From			
Co./Dept.	EVOS	Co.			
Phone #	278-8012	Phone #			
Fax #	276-7178	Fax #			

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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Alexander Panamareff III  
(Print Name)

Alexander Panamareff III  
(Sign Name)

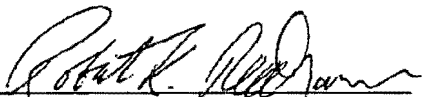
3-31-01  
(Date)

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Robert K. Needham

  
4-1-01

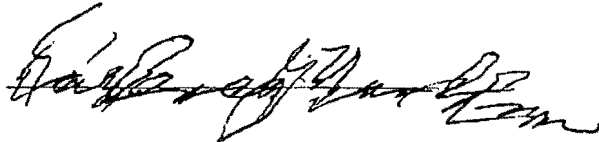


Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Darlenc J. Needham

A handwritten signature in dark ink, appearing to read "Darlenc J. Needham", written in a cursive style.

04-01-01

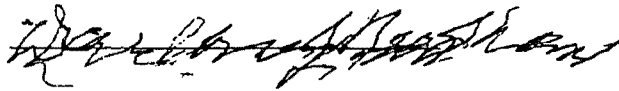
Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Zoya M. Needham By Darlene J. Needham

Power of attorney attached



04-01-01

**COPY****POWER OF ATTORNEY**

I hereby appoint Darlene J. Needham as my Attorney-in-fact on any and all matters pertaining to Karluk and/or Konaig Inc., with full authority to sign on my behalf all papers and documents and to do all things necessary to this appointment.

This appointment shall commence on January 29, 1998 and shall continue to be valid as Power of Attorney in the aforementioned matters, or for the aforementioned purpose, until such time that it be revoked in writing by Zoya M. Needham.

  
Zoya M. Needham

Subscribed to and sworn to before this 30<sup>th</sup> day of Jan, 19 98  
Jody Benson Notary Public, County of Mapache,  
State of Colorado  
9/4/01

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

VIRGINIA A. MALOTAS  
(Print Name)

Virginia A. Malotas  
(Sign Name)

03 29-01  
(Date)

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Thomas Alpik  
(Print Name)

Thomas Alpik  
(Sign Name)

3-29-01  
(Date)

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
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MARGARET Alpisk  
(Print Name)

Margaret Alpisk  
(Sign Name)

3-29-01  
(Date)

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Eileen Carlson  
(Print Name)

Eileen Carlson  
(Sign Name)

3/29/01  
(Date)

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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ELI B MALUTIN  
(Print Name)

Eli B Malutin  
(Sign Name)

3-29-01  
(Date)



**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Janice Martin  
(Print Name)

Janice Martin  
(Sign Name)

3/31/2001  
(Date)

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

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Cicpa Chua  
( Print Name )

Orga Chua  
( Sign Name )

3-29-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Barbara Hochmuth  
( Print Name )

Barbara Hochmuth  
( Sign Name )

March 29 - 2001  
( Date )

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

SELMA CHICHENOFF  
( Print Name )

Selma Chichenoff  
( Sign Name )

3/28/01  
( Date )

ROBERT CHICHENOFF

Robert Chichenoff

3/29/01

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

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KATHRYN L. CHICHENOFF  
( Print Name )

Kathryn L. Chichenoff  
( Sign Name )

3/28/01  
( Date )

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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LORI A OGLE  
( Print Name )

Lori A Ogle  
( Sign Name )

3/28/01  
( Date )

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

Ms. McCammon,

I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

KEITH J. CHICHENOFF  
( Print Name )

Keith J. Chichenoff  
( Sign Name )

3/28/01  
( Date )

by Selma McKee, P.O.A.

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

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Patricia Pruitt  
( Print Name )

Patricia Pruitt  
( Sign Name )

3/29/01  
( Date )



Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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Robert S Hochmuth

( Print Name )

Robert S Hochmuth

( Sign Name )

3/29/2001

( Date )

**Carolyn M. Merrigan**

2270 U.S. Route 7  
Leicester, Vermont 05733

---

Phone 802-247-0112  
Fax 802-247-2720

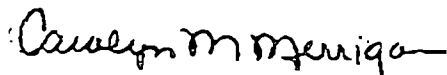
April 01, 2001

Molly McCammon, Executive Director.  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501  
Fax 907-276-7188

Dear Ms. McCammon,

I am a member of the village of Karluk; I want it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on or around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.

Sincerely,



Carolyn M Merrigan

March 30, 2001

E.V.O.S.  
645 G. Street, Suite 401  
Anchorage, Alaska 99605

Dear Sirs:

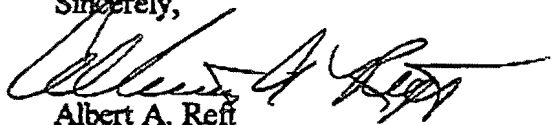
As a former shareholder of the Karluk Native Corporation, you are duly advised that I personally own 10 acres of land in Karluk, which is currently under consideration for purchase by your organization.

I do not know your motivation for wanting to purchase my 10 acres of land, nor do I care; but be advised that I have not authorized this sale to you by the Karluk Tribal Council, nor have I offered my 10 acres of land for purchase by you. Further be advised, that at best, you have been dealing with a renegade tribal organization which has for years wrongfully declared to you that they own my 10 acres of land in the Karluk area. I warn you now that they do not, that they never have, and that they never will own my 10 acres of land, and for your organization to attempt to purchase my property would only transfer title from one thief to another!

It would behoove your organization (of which I hope you will reveal, that you possess the utmost fair play practices) to immediately terminate your unfortunate negotiations with the Karluk Tribal Council to purchase my property.

Lastly, please take no solace in the fact that the majority of former shareholders of the Karluk Native Corporation have been widely dispersed since the transfer of title by Koniag, Inc. The fact that we former shareholders have had to deal with such appalling character of the Tribal Council has made it impossible for us to conclude our claim with the council. However, I can assure you that all other 185 former shareholders continue to OWN their 10 acre parcels of land like myself. *Irregardless of what the Karluk Tribal Council claims, our 10 acre parcels remain "In Trust" by them until such time we can successfully conclude the transfer of title to each former shareholder, NOT THE E.V.O.S.!*

Sincerely,



Albert A. Reft  
3009 Sea Gull Lane  
Stockton, California 95219  
(209) 952-8378  
Fax: (209) 466-5986

Copy to:  
Koniag, Inc.  
Chuck Reft

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Donna Vinberg

( Print Name )

Donna Vinberg

( Sign Name )

3-29-01

( Date )

Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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Allen Panamareff Sr.  
( Print Name )

Allen Panamareff  
( Sign Name )

03/28/01  
( Date )

## FAX COVER SHEET

Wanda Kaiser

Box 106  
Port Lions  
Alaska 99550  
907-454-2483  
907-454-2483

SEND TO Company name <b>EVOS</b>	From <b>WANDA KAISER</b>
Attention	Date <b>3-28-01</b>
Office location	Office location
Fax number <b>907-276-7178</b>	Phone number <b>907-454-2483</b>

☐ Urgent ☐ Reply ASAP ☐ Please comment ☐ Please review ☐ For your information

Total pages, including cover: 2

## COMMENTS

March 28, 2001

Exxon Valdez Oil Spill Trustee Council  
645 G. Street, Suite 401  
Anchorage, Alaska 99501-3451

Dear Members of the Council,

This letter is to inform you again, that I am one of the Original 186 shareholders in the Karluk Native Corporation and again, I am totally against any land sale negotiations between you and the Karluk IRA Council!!

There is much happening with Karluk right now and the near future so it would behoove you to table any negotiations until as such a time, as you have stated in the past, when you have 'willing sellers'.

You no doubt have received letters from other shareholder members who feel the same as I do. We, as a majority, do not want our land taken away from us and sold without our consent and since you know you have unwilling sellers, why is it still on your agenda? Do you have need this land or is it simply a want? What type of habitat protection is it that you are trying to form? You cannot be so blind as to think that any animal, land or thing can ever be more important than people. Some day we shall all, every one of us, stand before our Creator and give Him an accounting of our lives and I hope you have an answer acceptable to Him for things like this. Whether we believe this or not is irrelevant, the truth remains the truth whether we chose to believe it or not.

If you really want my land so bad, come and talk to me about it. If I somehow got the deed to your property to be held in trust by me, would you care in the least if I sold your home, car or condo in Hawaii without your permission? But, I may have darn good reason, after all the seagulls need someplace and it should be someplace nice and well, protected.

Can any of you, Mr. Tillery; Mr. Allen; Mr. Balsiger; Ms Brown; Mr. Gibbons and Mr. Rue, can any of you see how wrong any acquisition of land by you from Karluk done in this manner is wrong? Do you see that? Are you so blinded you truly cannot see? In my last letter, which remains unanswered to date, I mentioned that you should be people of integrity, are you that?

We are few people of Karluk but we are not without help and I shall give the success of our victory to the one that is going to make it happen, you know him and if you don't you should, and soon I might add.

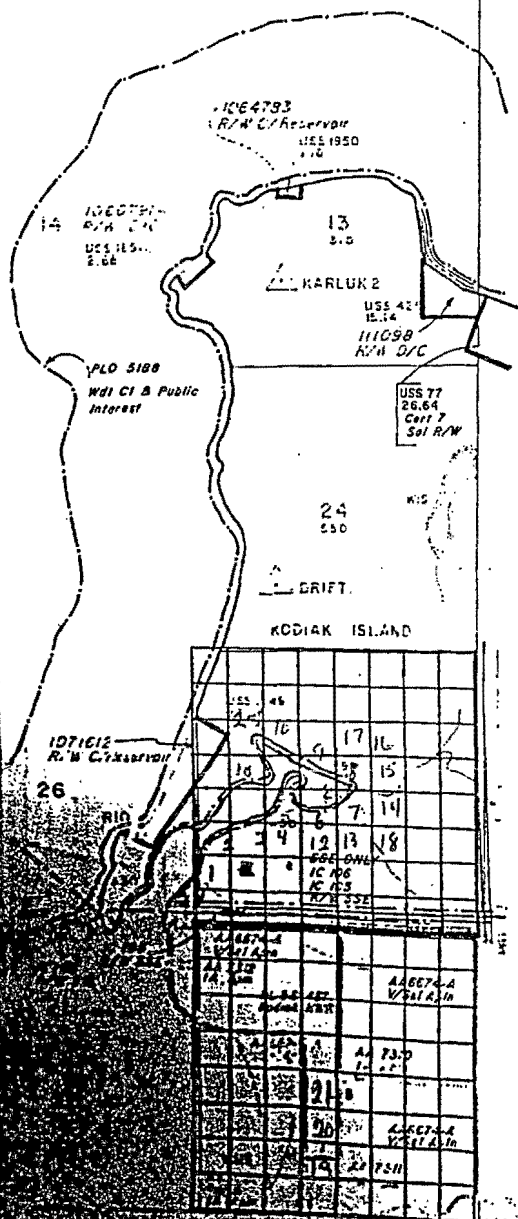
I await a response, Wanda Kaiser, Box 106, Port Lions, Ak. 99550 907-454-2483 phone & fax







MTP



INDEX TO SECRETARY'S TRACIS

STANDARD FORM NO. 64  
MAY 1962 EDITION  
GSA GEN. REG. NO. 27

U.S. GOVERNMENT PRINTING OFFICE: 1962 O - 380-100

FOR ORDERS, REQUESTING DISposal OR USE OF  
UNIDENTIFIED ASBESTOS MINERAL, SEE CLASSIFICATION  
MINERALS, WATER AND/OR OTHER FLUID PURPOSES.  
REFER TO INDEX OF ARSCELL SPECIES DOCUMENTS

## ENTIRE TOWNSHIP WITHDRAWN

BY P. L. 92-203, 12/18/71. AA 6674

**FLO 5153 3/9/72 WITHDRAWS LANDS FOR CL AND AID  
OF LEG WITHIN KODIAK MNR**

PLO 5184 3/9/72 WITHDRAWS LANDS FOR CL. ENCL  
THOSE WITHIN PLO 5183

Recommended to Congress pursuant  
to ANCSA Sec. 17 (d) (2)

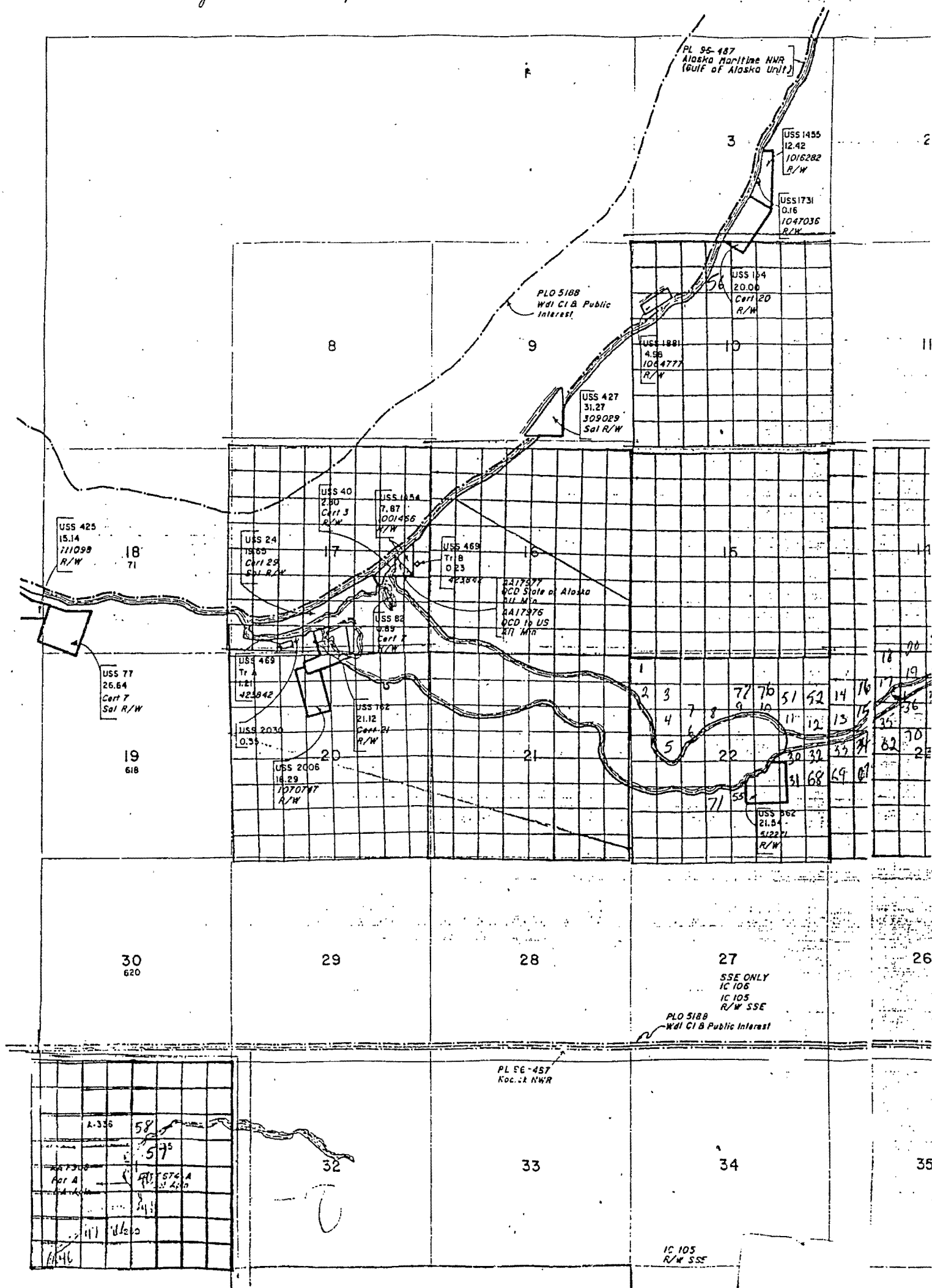
AA6674-EE Esmt Pursuant to Sec 17 (b) (3) PL 92-203  
12/18/1971 (Karluk)

1. *Clitoria Parianensis* (15) Jan. ✓
2. *Olga Parianensis* (15) Jan. ✓
3. *Clitoria Parianensis* ✓
4. *Alexandra Parianensis* (20) Jan. ✓
5. *Olga Parianensis* ✓
6. *Arthur Parianensis* ✓
7. *Barbara Parianensis* ✓
8. *Freda Parianensis* ✓
9. *Julius Parianensis* ✓
10. *Joanne Parianensis* ✓
11. *Lucas Parianensis* ✓
12. *Frederick Parianensis* ✓
13. *Marcus Parianensis* ✓
14. *Spencer Parianensis* ✓
15. *Isaac Parianensis* ✓
16. *Ray Parianensis* ✓
17. *Charles Parianensis* ✓
18. *Marion Howell* ✓
19. *Hubert Parianensis* (15 Jan.) ✓
20. *Harold Parianensis* ✓
21. *Clifford Parianensis* ✓
22. *Spencer Parianensis* ✓
23. *William Parianensis* ✓
24. *Edgar Parianensis* ✓
25. *Samuel Parianensis* ✓

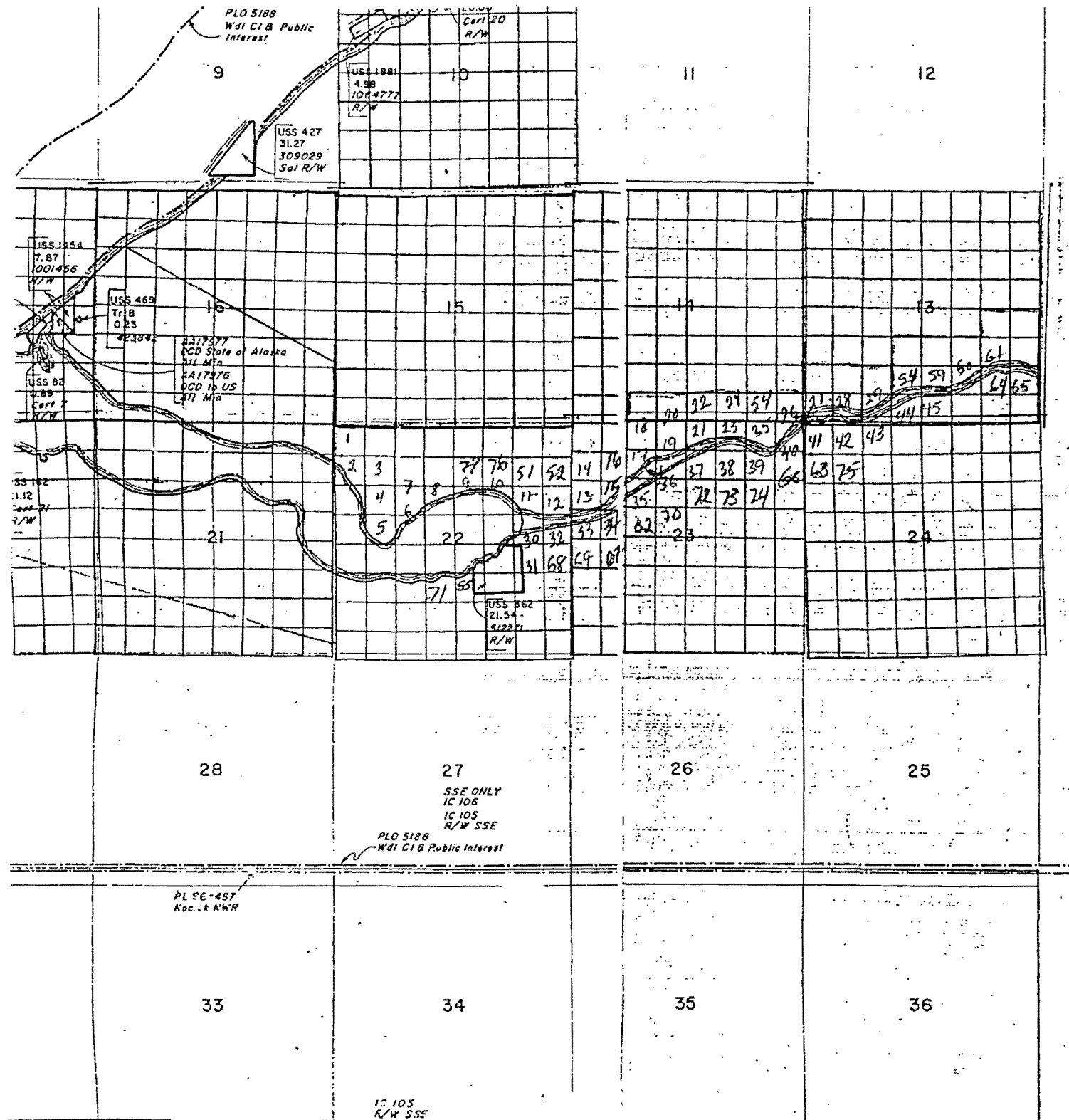
AUG 27 1952

# Karluk - Allen Pan

Unsurveyed Township 30 North Range 32 West



SCALE



FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

PL 92-203 12/18/1971 Wdi Entire Tp AA6711, AA6674

PLO 5183 3/8/1972 Wdi Entire Tp C1 & Aid of Leg within Kodiak NWR

PLO 5184 3/8/1972 Wdi Entire Tp C1 excl PLO 5183

Recommended to Congress pursuant to ANCSA Sec. 17 (d) (2)

AA 6674-EE Esmt Pursuant to Sec 17 (b) (3) PL 92-203 12/18/1971 (Karluk)

- 1 Chukchee Rkt ✓
- 2 Chukchee Rkt ✓
- 3 Chukchee Rkt ✓
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- 75 Chukchee Rkt ✓
- 76 Chukchee Rkt ✓
- 77 Chukchee Rkt ✓

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF INDIAN AFFAIRS

+

CONSTITUTION AND BY-LAWS  
OF THE  
NATIVE VILLAGE OF KARLUK  
ALASKA

+

RATIFIED AUGUST 23, 1939



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1939

## CONSTITUTION AND BY-LAWS OF THE NATIVE VILLAGE OF KARLUK

We, a group of Aleuts having the common bond of living together in the Village of Karluk, Territory of Alaska, in order to have better life and greater security, make for ourselves this Constitution and By-laws, by authority of the Act of Congress of June 18, 1934, as amended by the acts of June 15, 1935, and May 1, 1936.

### ARTICLE I—NAME

This organization shall be called the "Native Village of Karluk."

### ARTICLE II—MEMBERSHIP

**SECTION 1. *First Members.***—All persons whose names are on the list of native residents, made according to the Instructions of the Secretary of the Interior for organization in Alaska, shall be members of the Village.

**SEC. 2. *Children of Members.***—All children of any members shall be members of the Village.

**SEC. 3. *Loss of Membership.***—Any member may willingly give up his membership, or his membership may be taken away for good reason by the Village, or if he moves away from the Village, intending not to return, he shall lose his membership.

**SEC. 4. *New Membership.***—Any person who has lost his membership and any other native person may be made a member if he sets up a home in the Village.

**SEC. 5. *Membership Rules.***—The Village may make rules to govern membership, either for the purpose of carrying out this Article or covering membership matters not taken care of in this Article.

### ARTICLE III—GOVERNING BODY

**SECTION 1. *Choice of Governing Body.***—At a general meeting following the acceptance of this Constitution, the Village membership shall decide what kind of governing body it wishes to set up to speak and act for the Village and to use the powers of the Village. If there is a governing body already set up in the Village, at the time this Constitution is accepted, the membership may decide to keep that governing body, or it may choose a new form of government.

**SEC. 2. *Choice of Officers.***—The Village shall at the same time decide how members and officers of the governing body shall be chosen and how long they shall serve. The Village shall then choose the members to serve on the governing body and such officers as may be thought necessary.

SEC. 3. *Meetings of Membership and Governing Body.*—The Village shall decide when and how often there should be meetings of the whole Village membership as well as of the governing body; also it shall decide what notice shall be given for the calling of meetings and how many members must be present at such meetings in order to do business; and it may make any other rules necessary for the holding of meetings. A general meeting of the whole membership shall be held at least once a year.

SEC. 4. *Record and Report of Village Decisions.*—A record shall be made and kept of all the rules made under sections 1, 2, and 3 of this article, which record shall be called the Record of Organization of the Native Village of Karluk. Copies of this record shall be given to the teacher or other representative of the Office of Indian Affairs serving the Village. There shall be put in the record the names of all persons chosen to be officers of the Village.

#### ARTICLE IV—POWERS OF THE VILLAGE

SECTION 1. *Powers Held.*—The Village shall have the following powers:

To do all things for the common good which it has done or has had the right to do in the past and which are not against Federal law and such Territorial law as may apply.

To deal with the Federal and Territorial Governments on matters which interest the Village, to stop any giving or taking away of Village lands or other property without its consent, and to get legal aid, as set forth in the act of June 18, 1934.

To control the use by members or nonmembers of any reserve set aside by the Federal Government for the Village and to keep order in the reserve.

To guard and to foster native life, arts and possessions and native customs not against law.

SEC. 2. *Grant of More Powers.*—The Village may have and use such other powers as may be given to it by the Federal or Territorial Government.

SEC. 3. *Use of Powers.*—The governing body shall put into use such of the powers of the Village as the Village may give to it at general meetings of the membership and shall make reports of its actions to the membership at general meetings.

SEC. 4. *Rule-Making Power.*—The Village may make rules which are not against law to carry out the words of this Constitution.

#### ARTICLE V—RIGHTS OF MEMBERS

SECTION 1. *Right to Vote.*—All members of the Village 21 years of age or over shall have the right to vote in Village meetings and elections.

SEC. 2. *Right to Speak and Meet Freely.*—Members of the Village shall have the right to speak and meet together freely in a peaceable way.

SEC. 3. *Right to Share in Benefits.*—Members of the Village shall have equal chance to share in the benefits of the Village.

## ARTICLE VI—CHANGES IN THE CONSTITUTION

Changes in this Constitution and By-laws may be made if the changes are approved by the Secretary of the Interior and by a majority vote of the Village members voting in an election called by the Secretary of the Interior at which at least 30 per cent of the voting membership take part.

## BY-LAWS OF THE NATIVE VILLAGE OF KARLUK

## ARTICLE I—OFFICERS AND THEIR DUTIES

SECTION 1. *Village Records*.—The Village or the governing body shall choose one or more members who shall have the duty of keeping records of all actions and decisions of the Village and of the governing body and of giving copies of the records to the representative of the Office of Indian Affairs serving the Village.

SEC. 2. *Village Funds*.—The Village or the governing body shall choose one or more members who shall have the duty of caring for the Village funds and keeping records of all funds taken in and paid out and giving copies of the records to the representative of the Office of Indian Affairs.

SEC. 3. *Officers and Agents*.—The Village or the governing body may choose as many officers and agents as it may need to carry out its duties and shall state the length of service and the duties of each officer or agent when he is chosen.

## ARTICLE II—ADOPTION

This Constitution and By-Laws shall be in effect when it is agreed to by a majority vote of the Village members voting in an election called for the purpose by the Secretary of the Interior: *Provided*, That at least 30 per cent of the voting membership take part. The persons entitled to vote are all the adult native residents in the Village of Karluk.

## APPROVAL

This Constitution and By-Laws is hereby approved by the Assistant Secretary of the Interior and submitted for acceptance or rejection by the group of Aleuts having a common bond of living together in the Village of Karluk, Alaska, in an election called and held under the Instructions of the Secretary of the Interior.

All rules and regulations heretofore promulgated by the Interior Department or by the Office of Indian Affairs, so far as they may be incompatible with any of the provisions of the said Constitution and By-laws, will be inapplicable to the Village of Karluk, Territory of Alaska, from and after the date of adoption of this Constitution.

All officers and employees of the Interior Department are ordered to abide by the provisions of the said Constitution and By-laws.

OSCAR L. CHAPMAN,

*Assistant Secretary of the Interior.*

[SEAL]

WASHINGTON, D. C., July 7, 1939.



## CERTIFICATION OF ADOPTION

Pursuant to an order, approved July 7, 1939, by the Assistant Secretary of the Interior, the attached Constitution and By-laws was submitted for ratification to the group of Aleuts having a common bond of residence in the Village of Karluk, Territory of Alaska, and was on August 23, 1939, duly ratified by a vote of 56 for and 0 against in an election in which over 30 per cent of those entitled to vote cast their ballots, in accordance with section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat. 984), as amended by the Act of June 15, 1935 (49 Stat. 378).

EWAN M. NAUMOFF,  
*Chairman, Election Board.*  
LARRY M. ELLANAK,  
*Secretary, Election Board.*

CHESTER E. PETERSON,  
*Government Representative.*

○

RESOLUTION 80-5

BOARD OF DIRECTORS

KARLUK NATIVE CORPORATION

WHEREAS this Board has carefully considered the possibility of merging with Koniag, Inc., and

WHEREAS such a merger has been proposed with terms and conditions as set out in the attached Plan of Merger, and

WHEREAS this Board's paramount concern is the best interests of the shareholders of Karluk Native Corp., and

WHEREAS either a non-profit organization, or a governing council under the Indian Reorganization Act for the village of Karluk Native Corp., will be organized and that organization will have among its responsibilities the promotion of the interests of the shareholders of this corporation, and

WHEREAS the Plan of Merger provides that a portion of Alaska Native Fund money received after June 30, 1980, and to which this corporation is entitled, be distributed to the shareholders, and up to ten acres per shareholder, selected from the corporation lands by this Board, and a portion of the above-described Alaska Native Fund money be transferred to the non-profit organization or IRA Council, and

WHEREAS the Plan of Merger provides for transfer from this corporation to the non-profit organization or IRA Council of the right, under 14(f) of the Alaska Native Claims Settlement Act, to withhold consent for the exploration, development or removal of mineral resources within village boundaries, and

WHEREAS such transfers will benefit and preserve the interests of this corporation's shareholders, and

WHEREAS the Plan of Merger provides for transfer of this corporation's remaining lands and interests to, and for the assumption of its liabilities, obligations and responsibilities by Koniag, Inc., and

WHEREAS all shareholders in this corporation are also shareholders in Koniag, Inc., and

WHEREAS the transfer of these lands and interests to Koniag, Inc. will result in greater benefits for all shareholders due to centralized management and decreased administrative expense, and

WHEREAS the Plan of Merger also provides for merger with Afognak Native Corp., Ieishoi, Inc., and Nu-Nachk-Pit, Inc., and other village corporations may also merge, and

WHEREAS the Plan of Merger provides that shares of Karluk Native Corp. will be converted, one share for one share, for shares of Class B stock in Koniag, Inc., and holders of such stock will receive the distributions under 7(m) of the Alaska Native Claims Settlement Act, of Alaska Native Fund moneys and revenues under 7(i) of the Act, which would have been received by this corporation, and

WHEREAS, having considered these and other reasons, this Board has concluded that merger under the Plan of Merger is in the best interests of the shareholders of Karluk Native Corp.,

THEREFORE, IT IS HEREBY RESOLVED that the Board of Directors,  
on this 17<sup>th</sup> day of September, 1980, approves the merger of  
Karluk Native Corp. and Koniag, Inc. and the attached Plan of Merger,  
and recommends that the shareholders of Karluk Native Corp. approve the  
plan.

ATTEST: Connie E. Chye <sup>Corp.</sup> (Sec. 7)

Allan J. Panamoff  
President

KARLUK IRA COUNCIL  
KARLUK, ALASKA 99608

RESOLUTION # 82-5

Whereas, The Karluk Native Corporation and Koniag, Inc merged in December 1980 and,

Whereas, Up to ten acres of land per stockholder in the former Karluk Native Corporation is to be transferred to a village IRA Council or other village organization and,

Whereas, the maximum acreage to be transferred to the IRA Council or other new village organization and,

Now Therefore Be It Resolved That, a Karluk IRA Lands Committee be organized for the purpose of transferring these lands from Koniag, Inc. to the Karluk IRA Council. This Committee shall consist of five (5) members who will be Dolores Padilla, Alex Panamaroff, Jr., Connie Chya, Allen Panamaroff, and Mary Ann Holmes. This Committee will also be empowered to work with all land issues involving transfers which includes Section 14C3 of the Alaska Native Claims Settlement Act. Compensation, travel and expenses will be set by the Committee.

Passed this 27 Day of April at Karluk, Alaska.

Ronny Lind

Larry Sugar (vice pres.)

Emil Malutin

Paul W. Chya Jr.

Connie E. Chya (Sec.)

Council members

NOV-14-00 TUE 01:30 PM LCMF

FAX NO. 9072731831

P. 02

JUL 17 '92 14:23 CATHY STEVENSON ACCT.

P. 11

KARLUK VILLAGE COUNCIL  
 KARLUK VILLAGE  
 P.O. BOX 22 KARLUK, AK.  
 99808

July 17th, 1992

WE, THE KARLUK VILLAGE COUNCIL, DO HEREBY SWEAR THAT WE HAVE NEVER ATTEMPTED TO, OR HAVE ANY INTENTION OF DOING ANYTHING WITH THE LAND HELD IN TRUST BY THE COUNCIL FOR THE KARLUK VILLAGE MEMBERS. IF YOU ARE CONCERNED ABOUT THIS HAPPENING PLEASE CONTACT THE COUNCIL IMMEDIATELY!! THERE HAVE BEEN A LOT OF FALSE RUMORS CIRCULATING AND WE ARE MAKING EVERY EFFORT TO CLEAR UP THIS CONFUSION. ABSOLUTELY NOTHING WILL BE DONE WITH THIS LAND UNLESS THE WHOLE MEMBERSHIP AGREES ON WHAT THEY WANT DONE WITH THE LAND. IF YOU HAVE ANY QUESTIONS OR CONCERNS PLEASE FEEL FREE TO CALL THE KARLUK VILLAGE COUNCIL AT 941-2224. THE COUNCIL PRESIDENT CAN BE REACHED ALSO AT 941-2203, THE COUNCIL SECRETARY CAN ALSO BE REACHED AT 941-2206 KATHRYN REPT.

*Alicia Lynn Rept*  
 ALICIA LYNN REPT, President

*Edward Charlaga*  
 EDWARD CHARLAGA, Vice-President

*Kathryn Rept*  
 KATHRYN REPT, Secretary/Treasurer

*Dale Rept*  
 DALE REPT, Member

*Nice Charlaga*  
 NICE CHARLAGA, Member

*Emil Sugar*  
 EMIL SUGAR, Member

*Darryl Stewart*  
 DARRYL STEWART, Member

STATE OF ALASKA )

THIRD JUDICIAL DISTRICT ) ss

SUBSCRIBED AND SWORN TO before me this 17 day of July, 1992, at  
 Kodiak, Alaska.

*James R. Hall*  
 Notary Public in and for Alaska

Received Time Apr. 2. 3:55PM

RESOLUTION 92-01

NATIVE VILLAGE OF KARLUK IRA LAND COMMITTEE

WHEREAS, the Native Village of Karluk IRA Land Committee (Land Committee) is a duly appointed committee of the Native Village of Karluk, a federally chartered Tribe, as defined by the Indian Reorganization act of June 14, 1934 (IRA), and the Act of May 1, 1936, extending certain provisions of the IRA to Alaska, which has full authority to act in the following, and;

WHEREAS, the Land Committee has been delegated the authority to work with all land issues involving transfers which includes Section 14 (C) 3 of the Alaska Native Claims Settlement Act;

WHEREAS, the Land Committee has been given the authority to set funds aside for compensation, travel and expenses in order to carry out these duties;

NOW THEREFORE IT BE RESOLVED, that the Native Village of Karluk IRA Land Committee hereby certify that we are the duly elected, qualified and acting Chairman and Secretary of the Native Village of Karluk IRA Land Committee, and that the following is a full true and correct copy of the Land Committee and legally adopted at a meeting on this 16<sup>th</sup> of August, 1992, at which a quorum was present, and that such resolutions are in full force and effect and recorded in the minutes;

BE IT FURTHER RESOLVED, that all prior resolutions relating to any of the above matter be and they hereby are revoked;

BE IT FURTHER RESOLVED, that we certify that the following are those duly elected to the office set opposite their respective names:

Dolly C.R. Reft	Chair
Alex Panamaroff Jr.	Vice-Chair
Mary Anne Holmes	Secretary/Treasurer
Charlie "Chuck" Reft	Member
Gust Reft Jr.	Member
Allen Panamaroff	Member
Mary Reft	Member

CERTIFICATION

DATED THIS 16<sup>th</sup> DAY OF AUGUST, 1992.

VOTING FOR

4

NATIVE VILLAGE OF KARLUK IRA LAND COMMITTEE

ABSTAIN

0

ABSENT

3

PRESENT

4

Dolly C.R. Reft  
DOLLY C.R. REFT - CHAIR

Mary Anne Holmes  
MARY ANNE HOLMES - SECRETARY/TREASURE

# KARLUK TRIBAL COUNCIL

P.O. BOX 22

KARLUK, AK 99608

PH. #241-2224 &amp; FAX #242-2203

SEPTEMBER 29th, 1992

Dear Tribal Member,

Here is a bit of information coming to you from the Karluk village. We would first of all like to make it very clear that regardless of what you may have heard in the past, there is nobody in the village of Karluk that excludes outside members of the Karluk Village from being a member. We understand that you all have every right to Karluk's lands and its assets. There is no way that us individuals living in the village of Karluk will decide what is best for the whole membership on issues relating to the land and its assets. Please be very clear on that and if you should ever hear that the council in Karluk is trying to do something with the land or assets do contact us IMMEDIATELY!!

First of all we are sending off more tribal enrollment forms so that we make double sure that each person who may be a member of Karluk receives one. If you need additional copies please feel free to copy the one that you receive in your packet. This is very imperative that we first establish who are tribal members. We are not saying that you are not a tribal member we are just trying to find out who the members are. Many people who feel that they are members of Karluk contacted the Karluk Tribal Council in the past and were very offended by the fact that they were mailed a tribal enrollment form but that is not our intention. Please help us complete our tribal enrollment. Many people who live outside the village also want to vote on certain subjects that have arisen in the past but due to the fact that only tribal members have these certain rights we need to complete the tribal enrollment.

For years and years we all know that the council in Karluk has been chosen by the residents of Karluk and the people in the village of Karluk feel that members of the village of Karluk should continue to decide what governmental procedures should be followed in the village. This is only common sense due to the fact that the procedures only affect those that reside within the community. We can all understand that. In the near future we will be revising tribal rules and ordinances for the village of Karluk to in turn create more structure. We feel that this revision is very necessary for the future steps that will be taken by our tribal government. This revised constitution will better structure procedures and etc... that our village can live by. We are also drafting up, with our village legal consultant, a legal document that will take all the power that the council in Karluk may have had regarding their rights to do what they want with the land. This document will also state that it will be up to 51% of the membership of Karluk to decide what will be done with the land. The council never intended to do anything with the land, the only reason that we (Karluk residents) tried to elect a new land committee in May of 1992 was due to the fact that the previous land committee was not communicating with the people who are members of Karluk. But now if the individuals who are on the land committee elected back in 1984 were to get infor-

Received Time Dec. 20. 1:22PM



# KARLUK TRIBAL COUNCIL

P.O. BOX 22  
KARLUK, AK 99608  
PH. #241-2224 & FAX #242-2203

er to members cont...

mation out to the Karluk members we do not have a problem with that. We do realize now that we all should have sat down and spoke before everything got out of hand with all the lies and rumors we would not have taken the steps we have and for that matter maybe the land committee would have dealt with things in a different fashion. One good thing came out of all the uproar and that was everyone seemed to feel that people who are members of Karluk had better come together for the future of our community. Our community has, unfortunately, in the past years been getting smaller and smaller. That is a very great disadvantage for people who reside in the village of Karluk and we would all like to see our community grow to the size that it was before, maybe even bigger. We welcome anyone who would like to move into our village. If you care about our village and you want to be included in our governmental decisions please prove this to us and feel free to move into our village.

Recently the Karluk village residents had a meeting with an outside agency called the Alaska Power Systems in regards to our fuel and electrical utilities in the village of Karluk. As you may have heard recently we were extremely low on fuel in Karluk and didn't know what we were going to do. All the Karluk Tribal Council was approached by Alaska Power Systems out of the city of Anchorage... they proposed to manage our fuel and electrical utilities for one year with an option to buy the utilities in one year. Not only that but to also bring in fuel possibly in the amount of 50,000 gallons to help us out. We have taken their offer and if you would like to see the agreement and other paperwork relating to this proposal feel free to contact our office at (907)241-2234 or write us a letter:

Address: Karluk Village Council  
p.o. box 22  
Karluk, Alaska 99608

We have hired an accountant by the name of Cathy Stevens to take over the management of all financial aspects relating to council business. We feel that this step was very imparative due to the many rumors of financial misdealings of the council both now and in the past.

Thank you very much for your time and attention once again and please don't forget to fill out and send back the enclosed tribal enrollment form as soon as possible. We will continue to let you know what steps are being taken to help better the lives of the individuals who live in the community of Karluk and sometimes those who live on the outside of the community as well. Also when there is any new news relating to the land issues of Karluk and its members you will all be informed immediately.

SINCERELY,  
KARLUK IRA TRIBAL COUNCIL

Received Time Dec.20. 1:22PM

FROM RUPAL CAP

01.28.1993 06121

P. 7

9-30-92

## Native Village of Karluk IRA Council

## Resolution 92-

WHEREAS, the Native Village of Karluk IRA Council owns land pursuant to the merger agreement with Koniag, Inc., and

WHEREAS, the Council owns that land in trust for the entire membership of the Native Village of Karluk, regardless of their residence; and

WHEREAS, the Council has created a Land Committee to advise the Council and the membership concerning the options available to the membership with regard to disposition of that land;

NOW THEREFORE BE IT RESOLVED THAT the Native Village of Karluk IRA Council shall not alienate or otherwise encumber tribal lands without approval a majority vote of the entire membership of the Native Village of Karluk.

DATED this \_\_\_\_\_ day of August, 1992

Alicia Lyon - president

Ernie Oak - president

Edward Charlign - vice president

Emil T. Joseph

K-3 R. R. R. R. R.

Harold R. R. R. R.

Phil Charlign (member)

FROM KURL CAP

01.28.1990 06119

P. 7

9-30-92

**Native Village of Karluk IRA Council  
Karluk IRA Land Committee**

**MEMORANDUM**

**TO: Members of the Native Village of Karluk**  
**RE: Agreement between IRA Council and Land Committee**

The Native Village of Karluk IRA Council and the Karluk IRA Land Committee met in Karluk in the community hall on July 22, 1992, to discuss the membership petition of June 26, 1992.

After extensive discussion by council members, committee members and the general membership in attendance, it was unanimously agreed that an annual election for the IRA Council and the Land Committee should be held in October, 1992.

In order to conduct the election, it was also agreed that an election ordinance was needed, and that a draft ordinance would be prepared for membership approval in a special election to be held in September, 1992.

The terms of the proposed election ordinance were discussed at the meeting, and have been the subject of further discussion between the Council and the Committee since that time. The two groups have agreed that the election ordinance will provide for the following:

1. The tribal council and land committee election will be held in October in Karluk;
2. Voting may only be done in person;
3. Only residents in Karluk may vote in the tribal council election;
4. All members of the Native Village of Karluk, regardless of residence, will be allowed to vote in the land committee election;
5. The vote on the election ordinance will be held in September in Karluk -- voting may only be done in person, and the ordinance must be ratified by a majority of those members of the Native Village of Karluk (regardless of residence) who are present and who vote at that special election.

The tribal council and the land committee will serve as the interim council and committee until the election is held in October, 1992, and will abide by the agreement made at the June 2, 1992 membership meeting, subject to the following amendments:

FROM RURAL CRP

01.23.1990 06:20

1. The annual membership meeting and election will be conducted in October, 1992, rather than in April, 1993;
2. Eric Smith, attorney for the council, and Bart Garber, attorney for the committee, will jointly draft an election ordinance for review by the council and the committee;
3. The council will adopt a resolution stating that it shall not alienate or otherwise encumber tribal lands without approval of the majority of the entire membership of the Native Village of Karluk.

The current members of the IRA Council are Alicia Lynn Reft, Edward Charliaga, Kathryn Reft, Dale Reft, Nick Charliaga, Darryl Squartsoff, and Emil Sugak. The current members of the Land Committee are Alex Panamaroff, Dolly C.R. Reft, Charlie "Chuck" Reft, Mary Ann Holmes, Allan Panamaroff, Mary Reft, Gust Reft, Jr. (Betty Lind, alternate), and Connie Chya.

DATED this \_\_\_\_\_ day of August, 1992

Native Village of Karluk  
IRA Council

Karluk IRA Land Committee

Alicia Lynn Reft  
President

\_\_\_\_\_  
Chairman/Vice Chairman

K. R. Reft  
Secretary-Treasurer

\_\_\_\_\_  
Secretary

**Bart K. Garber, P.C.**  
1227 W. 9th Avenue, Suite 203  
Anchorage, Alaska 99501-3218  
(907) 258-2260  
Telefax (907) 258-1416

November 9, 1992

Alicia Lynn Reft, President  
Interim IRA Council  
P.O. Box 22  
Karluk, Alaska 99608

RE: Response to Election Proposal

Dear Lynn and Interim Tribal Council Members:

This letter is in response to your most recent memorandum regarding the proposed council and land committee elections. The land committee believes that it would be better for the village as a whole if one set of rules could be presented to the membership for review and approval rather than to propose competing plans. Based on discussions in meetings in Karluk and Anchorage with members residing in those communities, the members of the land committee propose the following election and organization plan:

1. The tribal council and land committee election will be held in October in Karluk;

Agreed. This complies with Article III, Sections 3 and 4 of the constitution (all citations refer to sections of the Karluk constitution) which require a general membership meeting at least once a year and an election of officers. October should

1/Karluk/Corres/201103

remain the annual meeting month even if this year's meeting and election run past this deadline.

2. Voting may only be done in person.

The land committee proposed four polling places which the tribal council had agreed to at the last membership meeting in Karluk on July 26, 1992. In order to address the council's apparent concern about local control, the committee proposes a compromise absentee ballot system set out below.

3. Only residents in Karluk may vote in the tribal council election.

The land committee understands the council's concern for local control and participation. However, the Karluk constitution requires that all members enjoy the right to vote regardless of the location of their physical residence: "All members of the Village 21 years or age or older shall have the right to vote in Village meetings and elections." Article V, Section 1.

Membership in the village is presumed unless it is willingly given up, taken away for good cause, or lost by moving away, **intending not to return**. The last clause means that tribal members do not need to reside in Karluk to enjoy the rights of members, including "the right to vote in Village meetings and elections." The tribal council's concern on this point can be managed without amending the constitution--as the tribal council's proposal on this point would require.

The following two part proposal does not require the tribe to amend its constitution.

#### Part I

a. The land committee proposes that all members shall be allowed to vote for tribal council members subject to the condition that the polling place be in Karluk.

b. Notice of the election shall be given 30 days prior to the date of the election by posting notice in the village and by publication in Kodiak and Anchorage.

c. Members may vote by absentee ballot so long as the member

- 1) is currently an eligible voter
- 2) has requested the ballot in writing
- 3) has included a self-addressed envelope, postage pre-paid, for the blank ballot, and
- 4) returns the ballot to the polling place in a timely fashion. Absentee ballots shall be accepted so long as received prior to the close of the polls.

d. Finally, all candidates for tribal council seats must physically reside in Karluk.

## Part II

All members of the Native Village of Karluk, regardless of residence, will be allowed to run for and vote in the land committee election.

A village rule shall be voted on by the general memberships to confirm that the Land Committee shall constitute part of the "governing body" for the village. The membership rule shall be passed pursuant to Article IV, Sections 3 and 4. The Rule shall be voted on in conjunction with the election ordinance. The principal components of this rule are as follows:

- a. The task of the land committee shall be "to stop any giving or taking away of Village lands or other property without its consent," "to control the use by members or nonmembers of any reserve set aside by the federal government for the village" together with any other land owned by the tribe.
- b. The land committee shall become the independent land planning and regulatory body for the Native Village of Karluk. The tribal council shall continue to carry out the local governance functions of the tribe related to service delivery, public safety and economic development.

- c. The land committee will have the authority to enact land use rules restricting uses on land owned by the tribe. The land committee also shall be authorized to apply for grants, employ consultants, maintain bank accounts, and exercise any other ordinary tribal power for the purpose of protecting village lands and land uses.
  - d. The land committee will be elected independently by the membership and will cooperate with the council in calling membership elections and meetings for the purpose of approving encumbrances or alienations of tribal land. The land committee and the tribal council will be subject to the same rules on removal from office. Any member may run for a seat on the land committee and everyone can vote in person or by absentee ballot in any land committee election.
  - e. The land committee will bind itself with the same resolution passed by the tribal council calling for general membership approval (by majority vote) of any encumbrance or alienation of tribal lands.
4. The vote on the election ordinance will be held in September in Karluk -- voting may only be done in person, and the ordinance must be ratified by a majority of those members of the Native Village of Karluk (regardless of residence) who are present and who vote at the special election.

Agreed, except provide for voting on the election ordinance and the organization rule as a block and reschedule both elections.

The tribal members currently living outside of Karluk generally concur with the compromise proposal set out in this letter. Some members still insist on more direct control over the functions of the tribal council. The land committee believes that the proposal strikes a balance between the interests of local self-governance and broader membership concerns regarding tribal lands and land uses. This proposal restricts council seats to members physically residing in Karluk, preserves full voting rights for all village members, and leaves the chief functions of the governing body in the tribal council while clarifying the status of the land committee. The land committee requests that the election ordinance and governing body rule be voted on as a block. The membership will agree to restrict council seats to persons physically

4/Karluk/Corres/201103




residing in Karluk If, and only if, the rule clarifying the status of the land committee passes at the same time.

The time for calling an election has long passed. Please contact me as soon as possible so that the election process, proposed rules and election notices can be finished and sent out as soon as possible.

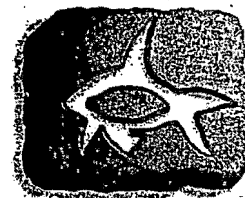
Sincerely,

BART K. GARBER, P.C.

  
by: Bart K. Garber

cc: Land Committee  
Eric Smith

5/Karluk/Corres/201103



KONIAG  
INCORPORATED

November 15, 2000

Ms. Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G. Street Suite 401  
Anchorage, Alaska 99501

Dear Ms. McCammon:

I am concerned about information Koniag has received that the IRA council of Karluk has been discussing a possible agreement with EVOS related to certain land that the Council controls. The content of the discussions is not the business of Koniag, but the welfare of our shareholders is. From this point, I am obliged to let you know that the land located at the mouth of the Karluk River was conveyed to the IRA in a caretaker status for all of the former shareholders of the Karluk Native Corporation (KNC) the Village Corporation for Karluk. This conveyance by Koniag was made as part of a merger agreement with KNC. This land was intended to benefit the former shareholders of KNC.

The materials circulated at the time of the merger indicated that the organization which received the land for the benefit of the former shareholders could either hold the land or distribute it to the former shareholders. No mention was made of transferring control to a third party certainly not distributing any proceeds to people other than the former shareholders.

As you may be aware, the management of these lands is of utmost concern to the former shareholders. Over 80% of these individuals do not live in the village and therefore have been denied the right to vote in tribal elections. At one time, a committee comprised of some of the non-residents and resident former shareholders was created to oversee these lands. The present Council, however, has chosen not to utilize such committee or even consult with the non-resident former shareholders.

4300 B Street, Suite 407  
Anchorage, Alaska 99503  
(907) 561-2668  
FAX (907) 562-5258

The failure of the present Council to deal fairly with the former shareholders is an issue of concern to the Board of Directors of Koniag.

Koniag advised the Karluk IRA several months ago that it would not enter into any agreements with them that included any of the land from ANCSA unless they agreed to include the original KNC shareholders as beneficiaries. They have not responded to date, which I take as a negative response.

Koniag's request is that EVOS insure that any agreements made with the Karluk IRA which involved land acquired under the merger include a provision that protects the rights of all of the former shareholders of the Village Corporation who were the intended beneficiaries of the land grant. Koniag has much of the documentation of the merger agreement if you require evidence supporting the information provided above.

Thank you for giving this letter your serious consideration.

Sincerely,

  
Dennis Metrokin

cc Dolly Reft  
Congressman Don Young  
Karluk Tribal Council  
KNC original Shareholders  
Koniag Board of Directors

DON YOUNG, CHAIRMAN

**U.S. House of Representatives**  
**Committee on Resources**  
**Washington, DC 20515**

November 20, 2000

Dennis Metrokin, President  
Koniag, Incorporated  
4300 B Street, Suite 407  
Anchorage, Alaska 99503


Dear Mr. Metrokin:

Thank you for advising me of Koniag's concerns with an impending land deal between the Exxon VALDEZ Oil Spill Trustee Council ("EVOS") and the Karluk IRA Council. I appreciate hearing from you.

Having reviewed your letter and the materials forwarded to me from the Executive Director of EVOS and Dolly Reft, I agree that the Trustee Council should not move forward with a purchase of the 1860 acres of land Koniag transferred to the IRA Council unless it is determined a land deal would equally benefit all 186 shareholders of the former Karluk Native Corporation. A letter expressing my views to Molly McCammon is enclosed for your review.

When I receive a response from EVOS, I will be back in touch with you.

Sincerely,

  
DON YOUNG  
Chairman

DY/cnf

Enclosure

ATTN: Chuck Reft

1062

<http://www.house.gov/resources/>

Received Time Nov.28. 8:44AM

**COPY**

CON YOUNG, CHAIRMAN

NOV 28 2000

**U.S. House of Representatives**  
**Committee on Resources**  
**Washington, DC 20515**

November 20, 2000

Molly McCammon, Executive Director  
Exxon VALDEZ Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501-3451

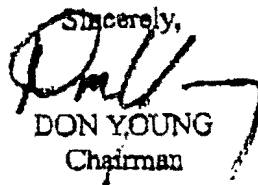
Dear Ms. McCammon:

I am writing in regard to the impending negotiations between the Exxon VALDEZ Oil Spill Trustee Council ("EVOS") and the Karluk IRA Council for the purchase of certain lands (or interests therein) presently held by the latter. The lands in question are the 1860 acres transferred by Koniag, Inc., to the Council for the benefit of 186 shareholders of the former Karluk Native Corporation. My staff has discussed this issue with you, and we have both been contacted by Koniag and Dolly Reft, a shareholder of the former Karluk Corporation.

You advised my staff that negotiations are not yet underway, and that if they are commenced, a full title search and analysis would be conducted by attorneys for EVOS to resolve any concern with the status of these lands. It appears the appraisal EVOS and the IRA Council agreed to is a an indicator that negotiations are likely to occur in the near future.

Having reviewed the materials you, Koniag and Dolly Reft sent me, it is my opinion that EVOS should not proceed with negotiations to purchase the subject lands (or an interest in them) until it is determined that a deal will equally benefit all 186 shareholders of the former Karluk Corporation in accordance with the intent of Koniag's original transfer of the 1860 acres. It might be prudent to delay action on these particular lands until the 186 affected Natives work out their concerns with the IRA Council. EVOS' Federal trustees have an official responsibility to see that benefits from ANCSA lands devolve to their intended beneficiaries.

Thank you for your consideration of my views, and I look forward to your response.

Sincerely,  
  
DON YOUNG  
Chairman

DY/cnf

cc: Dennis Metrokin

<http://www.house.gov/resources/>

2

Received Time Nov.28. 8:44AM

COPY

December 15, 2000

From: Allan Panamaroff, Mayor  
Larsen Bay, Alaska

Congressman Don Young  
United States House of Representatives

Subj: Karluk 1,860 acres  
Karluk Membership  
Karluk IRA Council

Washington, D.C.

Dear Honorable Young:

I was born in Karluk, Alaska in 1945 and have been a resident of Karluk up to September of 1989. I am also a member of the Karluk IRA organization from the time I was born to the present and I will continue to be a member of the Karluk IRA organization.

Recently, various members of the Karluk IRA Council have informed me, that my belief was not true. I was informed that if I did not live in Karluk, I was no longer a member of the Karluk IRA organization. Other than serving in the U.S. Navy until January of 1970, I have been involved in the political arena in Karluk on various positions throughout Karluk and the Kodiak Island area. I have served on the Karluk IRA council as President, for many of those years. As president, I have been involved with the constitution and by-laws of Karluk Village and have a strong understanding of the membership issues involving who can and cannot vote on various issues of the organization. Specifically, when the issues involve the Karluk IRA constitution and by-laws. Some of these issues involved membership in the IRA organization and their family, whether they lived in the community of Karluk or not. At no time during these times was a vote requested from the total membership to change the constitution and by-laws involving membership status. During those times, I have been involved with the Alaska Native Land Claims Act and the forming of the Koniag, Inc., and the Karluk Native Corporation. From its inception to the time of merger with Koniag Inc., I have been President of the Karluk Native Corporation, a majority of those years. I have been on the Karluk Land Committee since the Karluk Native Corporation was formed to the present date. The duties of the committee were to select lands and propose management of all land that was owned by the Karluk Native Corporation. In the early 1980's, a proposal was drafted to merge with the Koniag, Inc. Regional Corporation and all the other village native corporations in the Kodiak Region. As you know, after all the Native political "hubaloo", and court actions, the Karluk Native Corporation along with Nu-Nachpit, Inc (Village Corporation of Larsen Bay) was allowed to merge with Koniag Inc.

I was one of the major participants involved with the negotiations of the merger with Koniag. We received money and 10-acres of land per shareholder from these negotiations. Each shareholder was to receive 10 acres under the lands selected by the Native Corporation of Karluk. This selection was to take place before all parties signed the merger document. The Karluk Native Corporation did not do this. As a result, we chose to set the lands belonging to the shareholders into protection from creditors, taxation, and other encumbrances that would affect the rights of the former shareholders. The original selections reflect 1860 acres, which represent 10 acres per shareholder.

These were to be held in trust until the landowners voted on any action to be taken. As I mentioned earlier, a decision to place the lands (1860 acres of land) under protection of the IRA organization was made by the 186 members. These members were descendants of the original roll of Karluk Village.

I have also been instrumental in negotiating with the IRA Council to accept the 186 acres of lands to be deeded ownership to the former shareholders of the Karluk Native Corporation. The agreement also was made to make sure that if any sale, negotiation, and disposition of the 1860 acres of lands to be deeded over to the former shareholders of the Karluk Native Corporation. The agreement was also made to ensure that if any sale, negotiations, and disposition of the 1860 acres of lands would be the decision for the 186 former shareholders or their descendants. A majority of the former shareholders would constitute consent of any decision of the 1860 acres of lands. Another decision regarded the acceptance of the lands for certain protections mentioned earlier to be deeded over to the former shareholders of the Karluk Native Corporation. A decision was also made to assure that the land committee of the former Karluk Native Corporation was empowered to decide issues of management, sale, or deeded. The replacement or office terms would be decided by the former shareholders of the Karluk Native Corporation (186 member's) full membership, regardless of residency. Solely the IRA Tribal Council could not determine decisions concerning the 1860 lands. A decision of this caliber was safeguarded to require notification and vote of all 186 original members. (Or estate, inheritance to, etc.) We wanted to make sure that there was a strong affiliation between the IRA organization and Land committee due to the fact that lands were being held in common with the original membership. A point was also made with regard to membership to our village. Many of the shareholders were descendants of the IRA Organization and automatically members as provided in the constitution and by-laws. These points were made to ensure that a vote to change the constitution of the Karluk IRA Village would involve all members of the village - not just those serving on the Council itself. These safeguards were made to protect all members whether they lived in the village or not - many of our people left to find work, school or medical reasons. We had to ensure their membership and ties to the land were protected.

I moved from Karluk to Larsen Bay with my family due to threats to my family and myself. My wife was intimidated along with my five sons. My sons were in grade school in Karluk. Mary Reft and her children caused the threats and intimidation. A case in point would be; Lynn Reft the present president of the Karluk IRA Council would throw rocks from a beach towards myself and my sons, knowing that if any of those rocks hit me or my sons, would invoke serious injury. This happened in the fall of 1989, after the Exxon Valdez Oil Spill clean up.

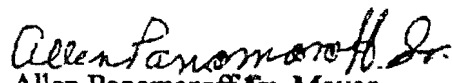
I have lived in Larsen Bay and am the Mayor of the City of Larsen Bay. I am presently no longer married, however I still have the conviction and belief that my sons and I are members of the Karluk IRA organization. I have not at any time revoked my membership and believe the constitution of the Karluk IRA protected that right. The constitution I am referring to is the one, which has not been revoked by the total

membership of the Karluk IRA Council while I was a resident of Karluk.

I have been advised that final negotiations for the 1860 acres that Karluk IRA organization is holding for the former shareholders of the Karluk Native Corporation is near. This is being done without the approval or knowledge of the 186 members. I know this is wrong and it should be stopped.

At this time I respectfully request any assistance, delays or stopping of this injustice to the 186 former shareholders, my children and myself. I thank you very much for your time and consideration on this matter.

Respectfully Yours,

  
Allen Panamaroff Jr., Mayor  
Larsen Bay, Alaska



ATTN Roger Drapaux

December 15, 2000

Congressman Don Young  
United States House of Representatives  
Washington, D.C.

From: Constance E. Chya  
Kodiak, Alaska

Subj: Karluk 1860 acres  
Karluk Land Committee  
EVOS Negotiations

Honorable Young,

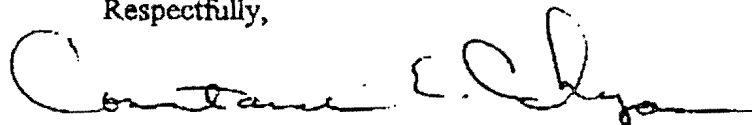
We have been referred to the Bureau of Indian Affairs regarding Karluk IRA's current negotiations with Exxon Valdez Oil Spill Trustee Council and our lands. These lands identify 186 original members, totaling 1,860 acres. These lands were put into protection of the IRA. In addition to this protection, we provided by resolution (82-5) a land committee to oversee the 1860 acres held in common with members living within and outside of the village. Any decisions affecting these lands should include all the 186 original shareholders.

Presently, the current IRA council is negotiating our lands without communications or involvement of all the members. In or attempts to stop these negotiations of our lands, we have contacted the 186 members of which we received 110 petitions (so far) of support to stop any negotiations to sell the land or put it in "Permanent Protection".

I was born and raised in Karluk and raised my five children in Karluk. I have never revoked my membership or intent to return to Karluk. Many of us moved out of the village due to lack of job opportunities; others for furthering their education, etc.

As an Elder, I urge you to look into this terrible injustice that is being done to me, my family (who are original shareholders of Karluk), and my people.

Respectfully,



Constance E. Chya

cc: Bureau of Indian Affairs  
File

Received Time Apr. 2. 3:55PM

**Activity Report for Karluk Membership  
Duties and Responsibilities of Our Tribal Government**

December, 20 2000

Bureau of Indian Affairs  
Att: Mr. Warren Heisler

Subj: Karluk Village Membership

Current negotiations with 1860 acres

Dear Warren:

NOTE: SUBMITTED 12-15-00  
TO WARREN HEISTLER  
SUBMITTED 12-18-00  
GLORIA GORMAN  
ROGER DRAPEAUX  
TIM DIASES  
NORMA LUSSIER  
FAXED TO NILES CESAR  
12-20-00  
HARD COPY MAILED 12-20-00

We spoke earlier today regarding the status of Karluk and lands concerning 186 members to Karluk Village. As promised, we are providing you with documentation regarding the present Karluk Council activities. In addition, please find attached letters from Mr. Allen Panamaroff and Constance Reft-Chya regarding our current status as members of Karluk.

The Karluk Council has refused to communicate or acknowledge our several attempts in stating concerns and requesting information of negotiations taking place between Exxon Valdez Oil Spill Trustee Council and the 1860 acres held in trust for the membership. Our final inquiry was stated by letter to their representing attorney, Mr. Walt Ebell in these negotiations. (attached)

Warren, these lands are the last of who we are as native people from Karluk. The persons making these decisions and involved in the negotiations are our "relatives". The obvious relation signifies our ties to Karluk. The actions of this Council are the final insult to our inherent rights to Karluk and represents the negligence to safeguard our rights as members to our village and rights to our land. Many of us subsist within the boundaries of Karluk and spend several months to obtain fish from the river. Please refer to petitions of support regarding our members "not revoking their intent to return to Karluk in addition to their membership."

I've also included a membership meeting held in 1992, where we voted on ordinances regarding the lands in addition to providing support to the Council. An attorney representing Karluk and the members assisted in defining our duties and obligations regarding our village. Any actions taken beyond this date was done without notifying the full membership of Karluk.

The membership has been patient with this Council and is requesting B.I.A. to assist in rectifying this situation. Please understand that the abuse from this council on a local level as well as to members living outside is a strong concern. Many people have been forced out of the village by this council due to abuse to themselves and/or their children. It is time to hold this council accountable for the many people abused in addition to the countless monies spent on a chosen "few".

Our immediate concern is our lands that are in negotiations with E.V.O.S.. We are

Bureau of Indian Affairs - Membership of Karluk - Hon. Young - Sen. Stevens - Sen. Murkowski - Koniag

Received Time Dec.20. 1:15PM

**Activity Report for Karluk Membership  
Duties and Responsibilities of Our Tribal Government**

**December, 20 2000**

members of this village and have never revoked our intent to return. Our other concern is for the abuse and neglect that has resulted from the present council. I need to emphasize that we have been taking statements from our people living in the village concerning the abuse and neglect of the council. Currently, there are people in hiding, because they are worried about their safety due to testimony given.

We have dealt with this issue before and realize that we need to intervene in helping our village resurrect a responsible council that will promote a safe environment that will encourage people to come back and Karluk to recover. Peoples lives are at stake Warren.

The last time we approached B.I.A. with these issues, a decision not to be involved was received by Mr. Al Kahklen. It is imperative that these issues be taken seriously due to the risk we are taking of the peoples safety. People from the village want to come forward but fear they may be putting themselves in jeopardy if nothing is followed through in making the Council accountable. I personally was threatened by this Council in addition to my children. The information is on file with the Alaska State Troopers.

Statements have been taken by the Troopers in a confidential manner due to the risk that people are taking in coming forward.

I pray for you and your wife regarding the challenges you face. I'll ask our Elders to hold you in prayer. Please do not let this issue slide. We cannot afford a blind eye to be given at this point in time.

Respectfully,



Dolly C.R. Reft~

fax: (907) 486-2465



*Roll F.V.I*

**UNITED STATES  
DEPARTMENT OF THE INTERIOR**  
BUREAU OF INDIAN AFFAIRS

West-Central Alaska Field Office  
3601 C Street, Suite 1100  
Anchorage, Alaska 99503-5947

IN REPLY REFER TO:

*Faxed and Mailed*

February 12, 2001

Ms. Dolly C.R. Reft  
415 Erskine Avenue  
Kodiak, Alaska 99615

Subject: Concerns Regarding Services under Native Village of Karluk Contract

Dear Ms. Reft:

This letter is in response to your letter of December 20, 2000 to the Regional Director, Niles Cesar. Although you have had the opportunity to speak to a number of Bureau Staff at the Field Office in Anchorage and the Regional Office in Juneau, it does not appear that you have been sent a written response to your concerns.

In your December 20<sup>th</sup> letter you ask for a number of items to be sent to you. I will address each as you have numbered them in your letter:

- > 1. You requested a copy of the original ANCSA roll for Karluk. We are not able to accommodate your request for a copy of the Karluk (ANCSA Village corporation) roll. The ANCSA roll is part of our system of records that contains confidential information on individuals and as such is protected by the Privacy Act.
2. The Bureau of Indian Affairs does not verify enrollment or membership of tribes. The BIA would not, as a routine matter, verify the petitions you refer to in your letter. Such verifications are most properly conducted by the Tribes, or Tribal council, since they have and maintain the Tribal roll. I would refer you to Mr. Timothy DeAsis, Regional Tribal Operations Office in Juneau, for any more specific questions you may have regarding the reasons the Bureau does not verify tribal membership rolls.
3. You have inquired as to what BIA assistance could be provided to tribal members in connection with negotiations between the Karluk Tribal Council (the tribe) and the Exxon Valdez Oil Spill Trustee Council (EVOS Trustees). The EVOS Trustees have conducted preliminary exploratory discussions with the tribe, because it holds title to certain acreage of interest to the Trustees, which was conveyed to it by Koniag, Inc., in connection with the merger of the Karluk ANCSA village corporation with Koniag, an ANCSA regional corporation. In light of a variety of concerns, including those relating to the status of the tribe and the nature of its land ownership, raised by you and others, the EVOS Trustees are not prepared to push for a land purchase agreement with the tribe in the immediate future.

Dolly Reft  
February 12, 2001  
Page 2

I note that you refer to these lands as "belonging to tribal members." It is not my understanding that they are individually owned; rather, I understand title to be held by the tribe as a collective entity, with its government acting on behalf of and in the interest of the membership. Whether the tribe is free to dispose of the acreage conveyed to it by Konlag entirely as it sees fit, or whether it holds title to that land for the benefit of former ANCSA village corporation shareholders, as some have asserted, is not a question that the BIA is equipped to resolve, or even obliged to take a position on. Likewise, any decisions that the tribal government might take in regard to entering into an agreement with the EVOS Trustees is a matter entrusted to the tribal government, and ultimately to the tribal membership. Unless requested by the tribal government to provide advice or consultation, the BIA has neither grounds nor legal authority for intruding into internal tribal affairs. We therefore do not feel that the BIA is in the position to offer individuals tribal members any assistance in connection with these matters, whether they be members officially recognized by the tribal government or not.

4. Your references to incidents of threats of physical violence, by the Karluk Tribal Council, are considered serious. During previous telephone conversations with Bureau staff, you have been advised to refer these issues to the Alaska State Troopers, which you stated you had done. As you may know, the State of Alaska operates the Village Public Safety program. The Bureau does not have a similar program in Alaska. *No VPSO in Karluk: (Godfrey) why was program pulled out? Glenn?*
5. The issue(s) referenced in your letter regarding the last membership meeting being held in 1992 is considered by the Bureau to be an internal tribal matter. As has been mentioned to you by other BIA staff, it is the Bureau's national policy to not interfere with the internal workings of a tribal government. It is however the hope of the Bureau that each tribe will conduct its tribal business in accordance with their constitution and bylaws and other appropriate internal or organic governing documents. *BIA has been notified that the constitution is not being followed*

As you know, the Native Village of Karluk has contracted various Bureau programs under the authority of P.L. 93-638. We are in the process of setting up a time to conduct a contract-monitoring trip to Karluk. *When? - cc of findings to members*

Our intent in conducting the contract monitoring is to ensure high quality services provided to all eligible individuals applying for services under our contract with Karluk. For your information, the service area for most of the Bureau programs under the contract is "the residents of Karluk." The exception to this is the Scholarship Program, which has a service population consisting of the enrolled members of Karluk and their descendants. ★ ★

Dolly Reft  
February 12, 2001  
Page 2

Ms. Gloria Gorman, Regional Social Worker and I will be in Kodiak tomorrow, Tuesday, February 13, 2001, on other business. We would be happy to meet with you at 11:00AM at the Fishery Industrial Technology Center, 118 Trident Way. I apologize for the short notice. I called your phone number last week to inquire about the possibility of a meeting. I left a message on your recorder, however, as of now I have not heard from you. I will be faxing this letter this morning and will tentatively plan on meeting with you while we are in Kodiak. *Nothing left on recorder.*

Please call me at the Anchorage number, 271-4088, by close of business today, if you would like to confirm our meeting with you. If you are not available, I hope this letter responds to your concerns outlined in your letter of December 20, 2000.

Sincerely,

Peggy J. Exendine  
Acting Field Representative

cc: Deputy Regional Director  
Regional Social Worker  
Regional Tribal Operations  
Regional Finance Officer  
> Native Village of Karluk

11.12.04

# Exxon Valdez Oil Spill Trustee Council

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



## TENTATIVE AGENDA EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL MEETING

April 3, 2001 10:00 a.m.

645 G STREET, Suite 401, ANCHORAGE

DRAFT

### Trustee Council Members:

#### CRAIG TILLERY

Assistant Attorney General/Trustee  
State of Alaska/Representative

#### MICHELE BROWN

Commissioner  
Alaska Department of Environmental  
Conservation

#### DAVID ALLEN

Director, Alaska Region  
U.S. Fish and Wildlife Service  
U.S. Department of the Interior  
Trustee Representative

#### DAVE GIBBONS

Trustee Representative  
U.S. Department of Agriculture  
Forest Service

#### JAMES W. BALSIGER

Director, Alaska Region  
National Marine Fisheries Service

#### FRANK RUE

Commissioner  
Alaska Department of Fish & Game

Teleconferenced in Anchorage, Restoration Office, 645 G Street  
Federal Chair

1. Call to Order - 10:00 a.m.
  - Approval of Agenda
  - Meeting notesJanuary 16, 2001
2. Investments - 10:15 a.m.
  - Review of Investment Fund asset allocation (possible\*)
  - Securities Lending Program\*
3. Public comment period - 11:00 a.m.
4. Habitat Issues
  - Small parcels (possible\*)
  - Executive session on Karluk IRA Proposal
  - Discussion of Karluk IRA proposal

Lunch provided to Trustees

#### Federal Trustees

U.S. Department of the Interior  
U.S. Department of Agriculture  
National Oceanic and Atmospheric Administration

#### State Trustees

Alaska Department of Fish and Game  
Alaska Department of Environmental Conservation  
Alaska Department of Law

1:00 p.m. Joint with Public Advisory Group:

5. National Research Council review committee presentation: NRC's interim report on GEM.
  - Mike Roman, Chairman
  - Don Bowen
6. Staff update on draft GEM plan
  - Molly McCammon
  - Phil Mundy
  - Bob Spies
7. Open discussion on GEM

**Adjourn 5:00 p.m.**

\* indicates tentative action items



# Exxon Valdez Oil Spill Trustee Council

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



## TRUSTEE COUNCIL MEETING ACTIONS

**January 16, 2001**

By Molly McCammon  
Executive Director

**DRAFT**

### Trustee Council Members Present:

Dave Gibbons, USFS  
●Marilyn Heiman, USDOJ  
James Balsiger, NMFS

●Frank Rue, ADF&G  
●Michele Brown, ADEC  
\*Craig Tillery, ADOL

#### \* Chair

In Anchorage: Gibbons, Heiman, Balsiger, See, Brown, Tillery, Slater

#### ● Alternates:

Barry Roth served as an alternate for Marilyn Heiman from 9:44 a.m. to 9:50 a.m.  
Marianne See served as an alternate for Michele Brown from 9:44 a.m. to 9:45 a.m.  
Claudia Slater served as an alternate for Frank Rue for the entire meeting.

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Meeting convened at 9:44 a.m., January 16, 2001

#### 1. Approval of the Agenda

**APPROVED MOTION:** Approved the Revised Agenda.

Motion by Balsiger, second by Heiman .

#### 2. Approval of the Meeting Notes

**APPROVED MOTION:** Approved December 4<sup>th</sup>, 5<sup>th</sup>, 8<sup>th</sup>, 2000 and January 4<sup>th</sup>, 2001  
Trustee Council meeting notes.

Motion by Balsiger, second by Gibbons.

Public comment period began at 9:47 a.m.

**Public comments received telephonically from 1 individual in Anchorage.**

Public comment period closed at 9:48 a.m.

3. Deferred Projects

**APPROVED MOTION:** Approved funding for Project 01538 (\$10,100) and recommendations for FY 01 deferred projects as outlined in Spreadsheet A (Attachment A), dated January 10, 2001, with the following conditions: (1) If a Principal Investigator has an overdue report or manuscript from a previous year, no funds may be expended on a project involving the Principle Investigator unless the report is submitted or a schedule for submission is approved by the Executive Director, and (2) a project's lead agency must demonstrate to the Executive Director that requirements of NEPA are met before any project funds may be expended (with the exception of funds spent to prepare NEPA documentation).

Motion by Balsiger, second by Brown.

4. GEM

**APPROVED MOTION:** Approved the conceptual approach to developing the draft GEM Research and Monitoring Plan, as presented by the Executive Director.

Motion by Balsiger, second by Brown.

5. Small Parcel Habitat Grant

**APPROVED MOTION:** Adopted resolution 01-07 signed January 16, 2001 (Attachment B) that provides for \$1,000,000, less Trustee agency costs, to be awarded as a grant to The Conservation Fund and The Nature Conservancy for a habitat protection effort in the *Exxon Valdez* oil spill-area ecosystem on behalf of the Trustee Council; the grant funds will reside in the Alaska Department of Revenue's *Exxon Valdez* Oil Spill Investment Fund and be disbursed per the terms of the Draft Grant Agreement.

Motion by Heiman, second by Brown.

**BREAK INTO EXECUTIVE SESSION**

6. Executive Session:

**APPROVED MOTION:** Adjourn into executive session to discuss habitat protection related to Koniag and two 10-acre parcels.

Motion by Gibbons, second by Heiman.

Off the record at (10:59 a.m.)

On the record at (11:50 a.m.)

7. Koniag Conservation Easement

**APPROVED MOTION:** Adopted resolution 01-08 (Attachment C) which rescinds and replaces resolution 01-05 adopted on January 4, 2001 and provides funds for the United States and the State to enter into an Agreement (Attachment D) with Koniag for the protection of 57,900 acres of Koniag lands. This resolution adopts the prior agreement with the following changes: 1) revises Section I of the conservation easement to clarify that unguided public use is a purpose of the conservation easement and the Master Agreement; 2) revises Section X dealing with enforcement language; 3) fixes some typographical errors in the Special Account description and; 4) provides that the Special Account be increased by \$250,000 in order to cover the addition to the conservation easement of the Koniag lands on the east side of Uyak and Zachar Bays, unless Koniag chooses the option of exchanging for these lands owned by the U.S. Department of Interior on the south side of the Village of Larsen Bay.

Motion by Heiman, second by Brown.

8. Two Kodiak 10-acre parcels

**APPROVED MOTION:** Adopted resolution 01-06 (Attachment E) to provide \$36,000 in funds for the United States Fish and Wildlife Service to offer to purchase and, if the offer is accepted, to purchase all of each seller's rights and interest in two 10-acre parcels described as KAP 2067 and KAP 2068 and to provide funds necessary for closing costs recommended by the Executive Director and approved by the Trustee Council.

Motion by Heiman, second by Brown

Meeting adjourned 12:14 p.m.

## Investments

## MEMORANDUM

TO: Trustee Council

FROM: Molly McCammon  
Executive Director

DATE: February 28, 2001

RE: Investment Fund Recommendations

On February 22, 2001 the Investment Working Group met to review investment fund reports, portfolio performance against passively managed benchmarks, and Callan's 5-Year Market Projections, and to discuss the asset allocation mix and Revenue's securities lending program. The following is a summary of that discussion and the group's recommendation to me.

### 1. Asset Allocation

We are still within the bands of the Trustee Council approved asset allocation mix. If we keep our existing asset allocation mix, a slightly lower rate of return (8.25% to 8.147%) is projected by Callan Associates. Any gain that might be realized by rebalancing the asset mix at this time would most likely be offset by the transaction cost. Per the Investment Policies, there is no mandate to rebalance the asset allocation mix as long as we are within the bands for each allocation class. In the near future, we will probably want to rebalance (\$3 to \$4 million) to get us closer to our target, but this would really be just a fine tuning and within the scope of the Executive Director's authority.

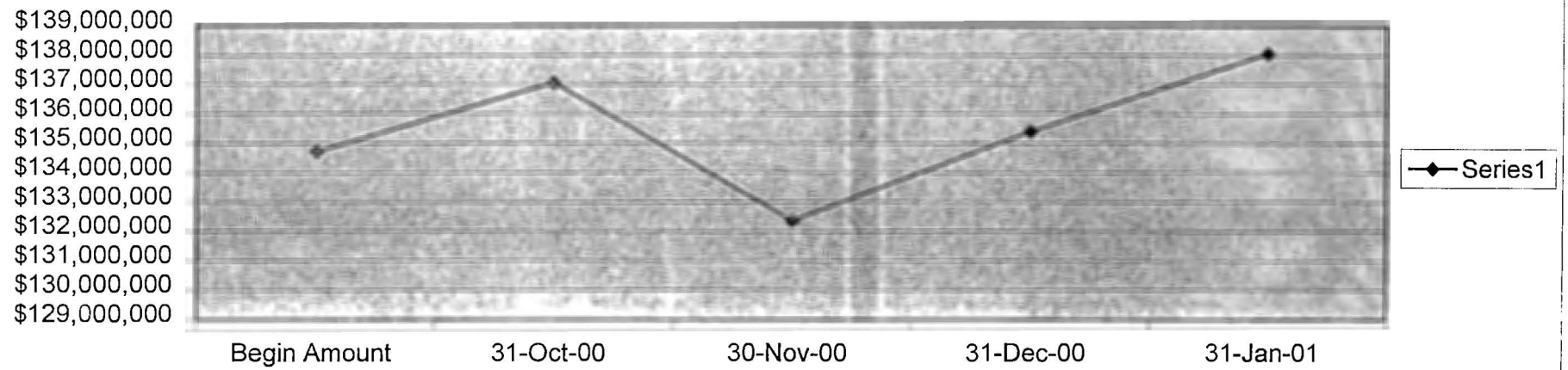
Recommendation: Do not make any change to the asset allocation mix at this time. Adjust our earning projections to the 8.147% rate of return.

### 2. Securities Lending Program

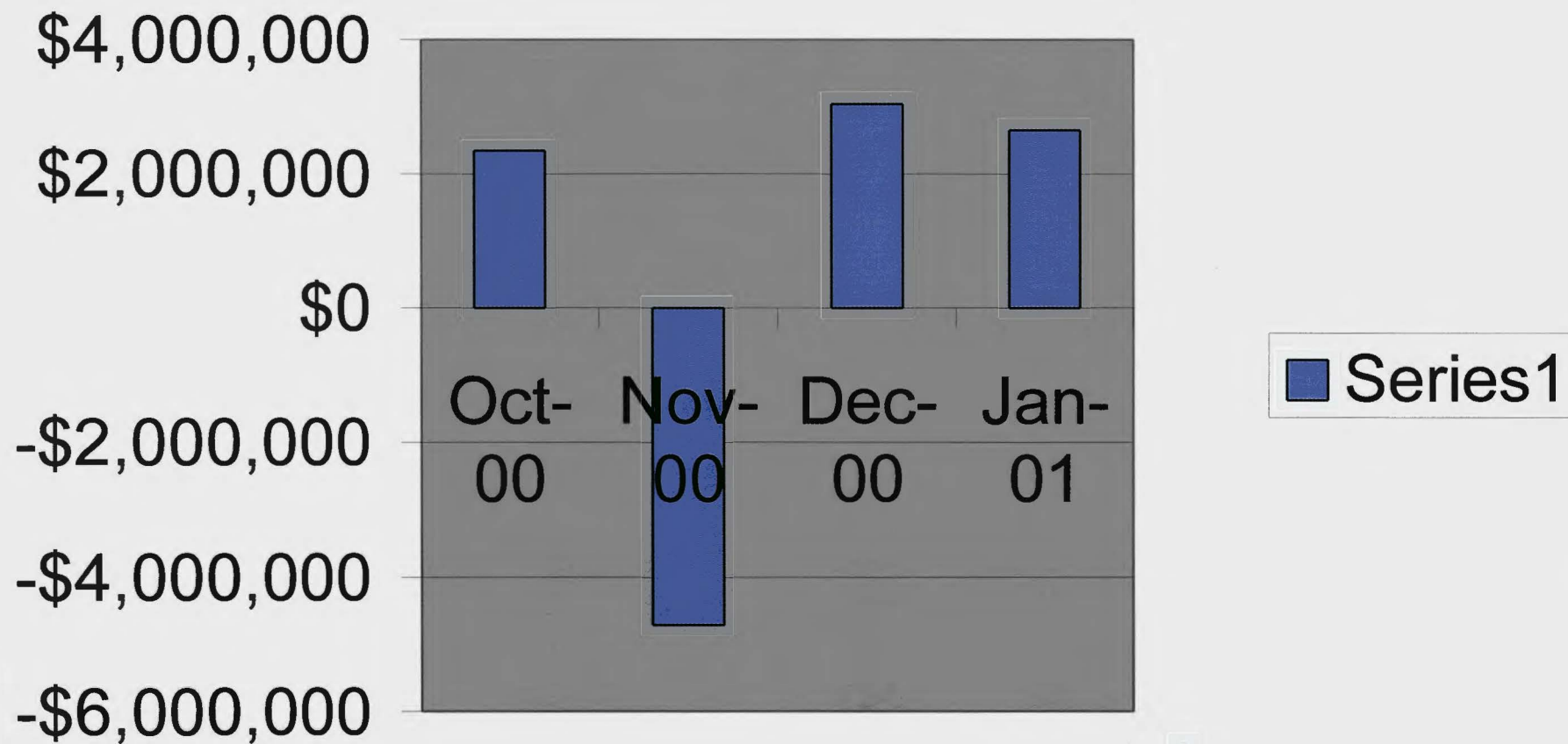
Securities lending for the Trustee Council would only involve the international equities and fixed income pools. John Jenks has negotiated an excellent deal with State Street that protects the state's assets because of the indemnification clause against loss on lent collateral. If the Trustee Council participated in the program, it would be a small risk for a small reward. All of the funds invested by the Department of Revenue are currently participating in this program, with the exception of the Trustee Council and the University of Alaska (they also are considering it). This requires Trustee Council action. Attached for your review are: 1) materials describing the program and 2) a memo from Department of Revenue's John Jenks to Commissioner Wilson Condon on the subject.

Recommendation: The Trustee Council's Investment Fund should participate in the Department of Revenue's securities lending program.

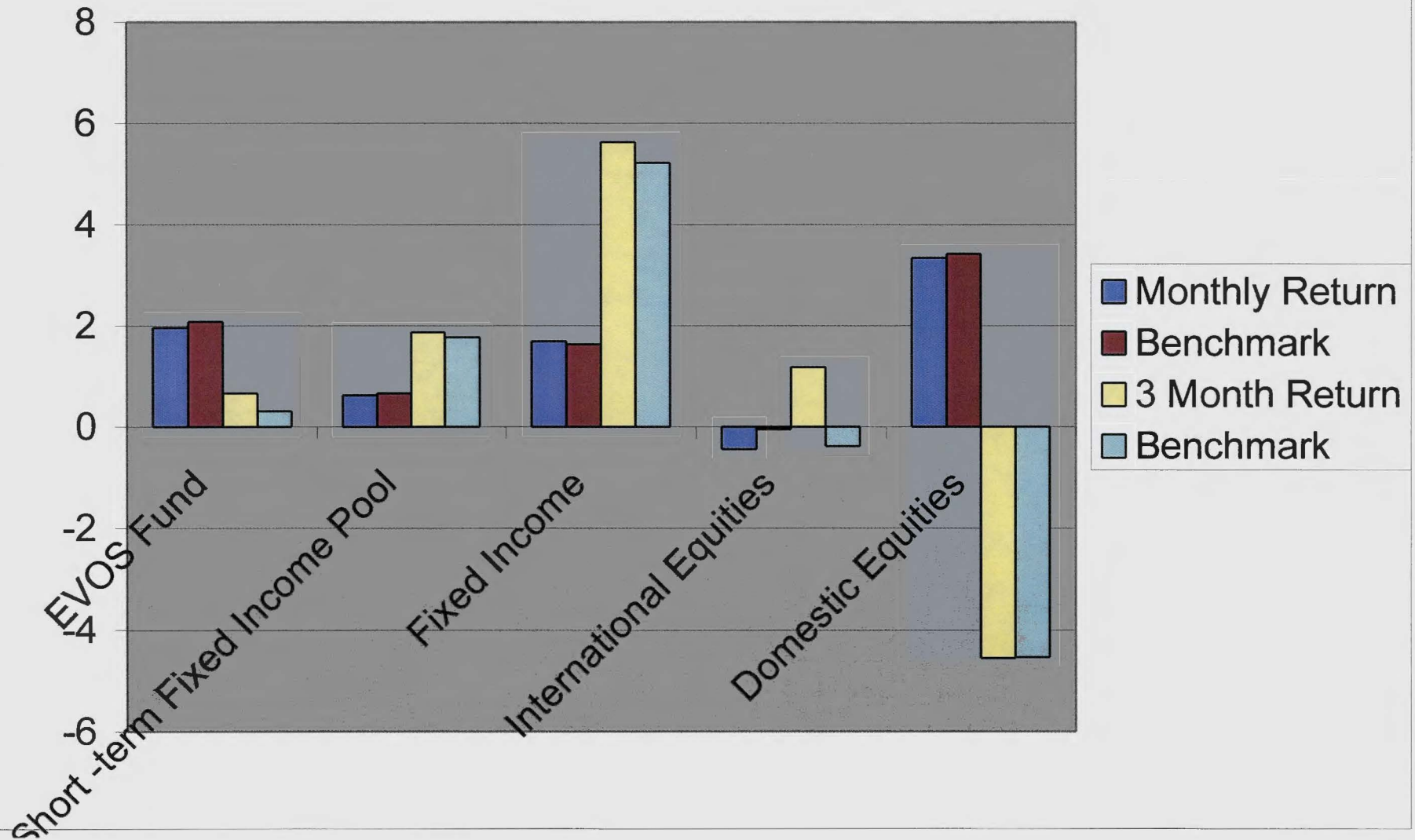
Investment Fund Assets



# Investment Fund Earnings (Loss)



## January 2001 Performance Measurement

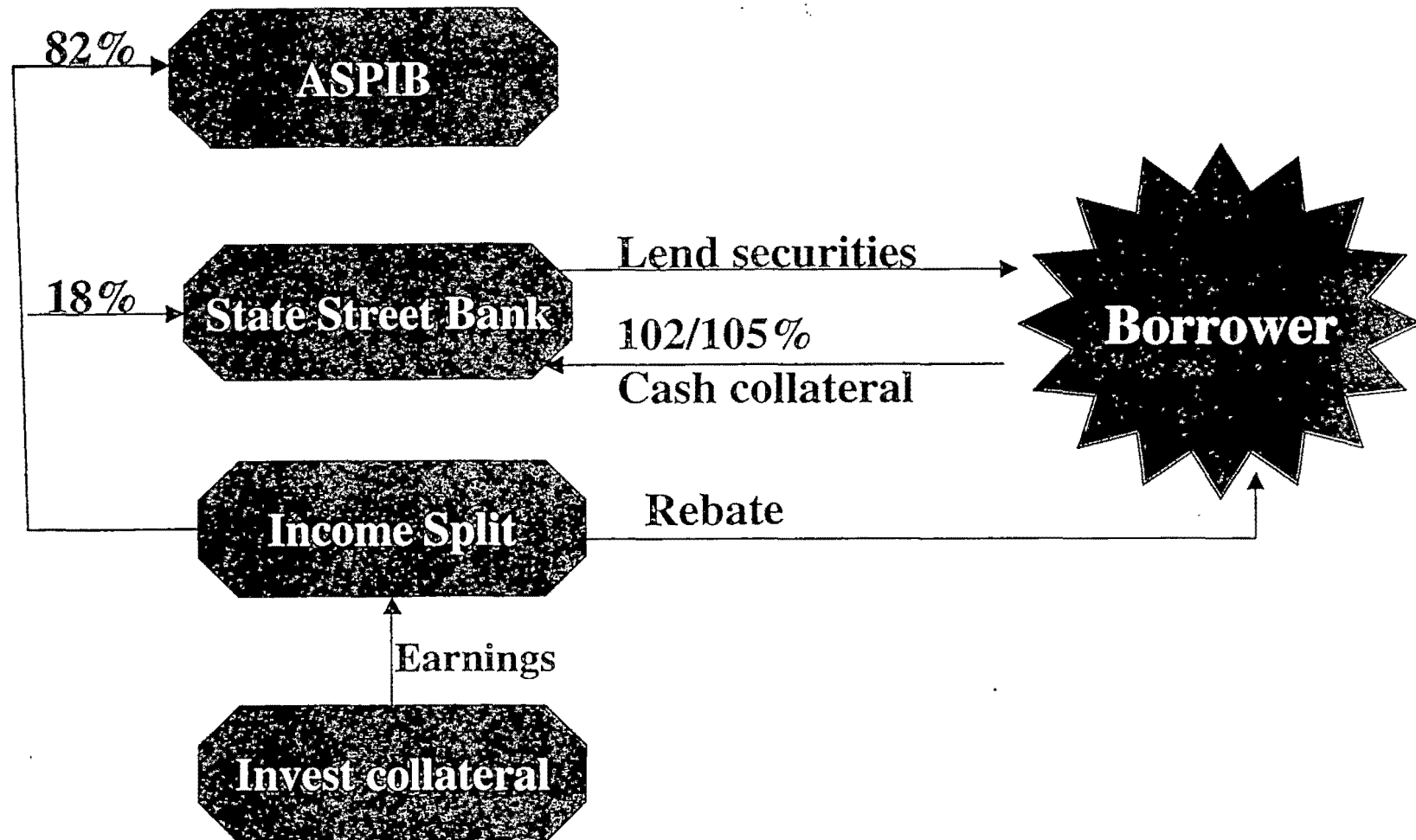




# What is Securities Lending?

Lending of securities to a third party for a fee or with the intention of investing the cash collateral to earn a small profit.

# Securities Lending



# Why do people borrow securities?

- Facilitate timely settlement of trades
- Arbitrage opportunities
- Short selling
- Tax strategies

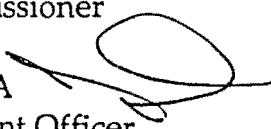
# MEMORANDUM

## STATE OF ALASKA DEPARTMENT OF REVENUE Treasury Division

To: Wilson Condon  
Commissioner

Date: January 5, 2001

Thru: Neil Slotnick   
Deputy Commissioner

From: John Jenks, CFA   
Chief Investment Officer

Telephone: (907) 465-4399

Subject: Securities lending

Recommendation: The State should resume a securities lending program that parallels the program established for the Alaska State Pension Investment Board. The program should cover all assets not precluded from lending by statute or other constraints except for the Domestic Equity Investment Pool.

Starting in early 1991 and continuing until mid 1995 the State as well and the retirement systems had in place a securities lending program that covered all public securities. That program was terminated in mid 1995. There were several features of the program and the securities lending market in general that led to its termination. The most important of these features were:

1. Neither the staff or the fiduciaries at the time of termination had been involved in the development or implementation of the program;
2. The state was using the proceeds from the lending program to pay for custody services. When market conditions resulted in losses or insufficient income to pay custody fees, budget complications resulted;
3. Securities lending programs have potential risk in several areas but much of the risk mitigation and education effort had been placed on the counterparty default issue. Not enough focus had been placed on the reinvestment of cash collateral risks; and
4. State Street Bank's, the securities lending agent, systems were not sufficiently developed to be useful monitoring tools for the Department of Revenue and the Department had no useful substitute.

Before reviewing the State's previous experience with securities lending and evaluating the current proposal a brief overview of the risks is necessary. The three primary sources of risk in any securities lending program are:

1. Operational Risk. This is the risk that normal or expected transactions will be delayed as a result of the mechanical process involved in securities lending. Examples of this risk are failure to receive dividends on loaned securities on the day they were due or failure to settle a security sale because the lending agent had not coordinated with the custodian regarding the return of the loaned security.
2. Counterparty or Default risk. This is the risk that a borrower of the State's securities fails for any reason to fulfill its responsibilities under the securities lending agreement. The worst case scenario is when a counterparty goes bankrupt and does not return securities. Other examples are failure to remit to the State a dividend payment made for a stock on loan or failure to pass on or act on a corporate action like a rights offering.
3. Reinvestment risk. Most Securities lending programs rely heavily on accepting cash collateral to insure the return of the loaned security. This cash is invested by the securities lending agent while it is held. To the extent that the investments purchased with that cash do not earn the anticipated rate of return the lending program could fail to make or could lose money.

The original securities lending program was reasonably successful during the first three years of its existence. Both the State and the retirement systems received significant earnings in excess of the cost of custodial services, which were also paid for out of proceeds from the program. Earnings in FY 93 were almost \$6 million. Over the four years of the program the State and the Retirement system collected approximately \$18 million.

During 1994 the Federal Reserve raised short-term interest rates by 3.00 percent. By late 1994 and early 1995 this sharp increase in short-term interest rates had caused investment losses in a number of securities lending programs. Mellon Bank and Bank of America had high profile losses as they infused hundreds of millions of dollars into their programs to make customers whole. The problems with State Street were not as great but they were still significant. Their investment problems resulted in one month of losses and months of concern that earnings would not be high enough to cover the custodial service fees. The lack of budget authority to pay for custodial services complicated the entire situation. Additionally, based on how the money market funds used to invest the cash collateral work, there was an unrealized loss that would be realized if the lending program were suddenly terminated.

Department of Revenue personnel, myself included, attempted to analyze the investments that were made with the program's cash collateral. That process was very difficult. Industry practices had not focused on client review of the investments being made or of the asset/ liability mismatch within the lending programs. After significant effort the securities lending portfolio was analyzed. Staff was not comfortable with some of the holdings or with its ability to regularly review the holdings going forward. Based on that the Chief Investment Officer at the time, Robert Storer, recommended to the Commissioner of Revenue and the Alaska State Pension Investment Board that they withdraw from the program. Both Fiduciaries accepted the recommendation and staff

worked with State Street to terminate the program in a manner that resulted in no additional losses being realized.

Since that time there have been a number of changes in the securities lending industry. These changes focused on the investment of cash collateral, the asset/liability match between the loan term and the investment term, and reporting systems. New entrants to the securities lending business drove much of this change. These new entrants while largely ineffective in getting much business, did force the custodian banks to materially improve their programs. The program State Street is offering to the State and ASPIB is significantly improved over the original program.

The program that I am recommending to you addresses the three sources of risk in a securities lending program. Below is a brief discussion of how each risk source is addressed.

**Operational Risk.** Using the custodian bank as the lending agent and having State Street agree that nothing in the lending agreement affects or reduces their responsibilities under the custody contract virtually eliminates this risk. Using one organization will significantly reduce the possibility of an operational problem, leave one party responsible if there is a problem and leave undisturbed the contractual protections available in the custody contract. During the original lending program there were no operation problems.

**Counterparty Risk.** The responsibility for selecting and monitoring the counterparties used in the program is solely State Street's. The collateral held by the program at 102% of the value of the loaned securities is the first measure to control this risk. Should this prove to be inadequate State Street will indemnify the State for any losses resulting from counterparty failure or default subject to limitation relating to war, civil unrest or revolution, or beyond the reasonable control of State Street. Because this risk was long perceived as the major risk in securities lending this type of indemnification has long been the standard.

**Reinvestment Risk.** This is a major source of risk and was the source of problems in the original program. The new program has significant improvements in a number of areas relating to this risk. First, State Street is taking responsibility for any loans that have a loss. Any shortfall in cash collateral necessary to make payment back to the borrower will be made up for by State Street. This is to be measured on a loan by loan basis so that good loans will not be offset against bad loans. This is a very significant provision of the agreement and is very unusual in the industry. State Street has developed a performance analysis system, which will allow staff to easily and efficiently monitor the investment risk in the program. This was a serious shortfall of the previous program. Finally, the new program has incentives for State Street to liquidate the program in an efficient and short time frame if you chose to withdraw from the program.

While no investment transaction is zero risk this program is very low risk. State Street is among the largest lenders in the business. The indemnifications they are offering are

very attractive. In the event that the State were to need the indemnification State Street's credit rating would be important. Their credit rating is Aa3/AA-.

The reason to have a securities lending program is to gain some additional revenue with very little increase in risk. Revenue estimates are somewhat difficult to make but a reasonable estimate based on the non-retirement assets as of June 30 was approximately \$2.3 million dollars per year.

There are several funds that need special review or action prior to their participation in the program. Some research was required to make certain that the airport funds, both revenue and construction can participate. Deven Mitchell has provided me with written assurance that the airport fund can participate. Additionally, the Department manages funds for several other fiduciaries, the University System and the Exxon Valdez Oil Spill Trust that need to make their own determination about participation. Pending their decision to participate in the lending program their proportional share of total assets in any pool will be withheld from the lending program. The University System has indicated they would like to participate in the program. Once the Department receives written confirmation their assets would be included.

The Exxon Valdez Oil Spill Trustees will be meeting over the next several months to consider their participation.

Finally, the domestic equity investments of the State are made through a collective trust vehicle. The Russell 3000 assets can not at this time participate in the program developed for the balance of the State's assets. They could be lent but under a program that does not provide as much protection. These assets are not attractive assets to lend so the revenue loss for not lending them is minor. Therefore, I am recommending that the domestic equity pool not engage in securities lending at this time.

cc: Betty Martin, State Comptroller

# MEMORANDUM

State of Alaska

Department of Revenue  
Office of the Commissioner

TO: John Jenks  
Chief Investment Officer

DATE: January 8, 2001

TELEPHONE:

FAX:

FROM:  Wilson L. Condon  
Commissioner

SUBJECT: Securities lending

I accept your recommendation to resume a securities lending program as set forth in your memorandum to me dated January 5, 2001.





# Exxon Valdez Oil Spill Trustee Council


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



## MEMORANDUM

TO: Trustee Council

THROUGH: Molly McMahon  
Executive Director

FROM:   
Debbie Hennigh  
Special Assistant

DATE: March 13, 2001

RE: Quarterly Report for the Period Ending December 31, 2000

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The attached reports consolidate the financial information submitted by the agencies for the quarter ending December 31, 2001.

The first report is a summary of activity by restoration category. This report reflects the total adjusted authorization and the total expended/obligated by Work Plan year and restoration category.

The second report displays the financial information by Fiscal Year. This report is used to determine what portion of the unexpended/unobligated balance or lapse is available to off set future court requests. Included are adjustments to reflect unreported interest and other revenue. It is estimated that \$4,704,245 is available to off set future court requests. This estimate includes lapse associated with Fiscal Years 1992 through 2000 and unobligated funds associated with other authorizations for which the purpose has been accomplished.

The third report is a summary of financial information associated with the 2001 Work Plan.

If you have any questions regarding the information provided, please call .

Attachments

Cc: Agency Liaisons  
Bob Baldauf

Exxon Valdez C II Trustee Council  
Quarterly Financial Report As of December 31, 2000  
Category

Category	92' Work Plan			93' Work Plan			94' Work Plan			95' Work Plan		
	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated
General Restoration	4,103,070	3,793,459	92.45%	3,126,013	2,172,316	69.49%	5,248,300	3,169,392	60.39%	5,232,695	4,436,734	84.79%
Monitoring							2,883,118	2,571,396	89.19%	3,080,926	2,460,924	79.88%
Research							8,640,710	8,085,273	93.57%	10,726,431	10,107,500	94.23%
Monitoring and Research	2,237,788	2,206,587	98.61%	4,204,925	3,626,649	86.25%	417,200	335,717	80.47%			
Damage Assessment	7,807,100	5,740,168	73.52%	1,991,807	1,570,900	78.87%	0	0	0.00%	0	0	0.00%
sub-total	14,147,958	11,740,215	82.98%	9,322,745	7,369,866	79.05%	17,189,328	14,161,778	82.39%	19,040,052	17,005,158	89.31%
Habitat Protection	0	0	0.00%	486,200	156,760	32.24%	3,747,292	1,656,323	44.20%	2,757,322	2,231,447	80.93%
Administration	5,076,100	4,291,788	84.55%	4,136,052	2,647,818	64.02%	4,813,880	4,008,303	83.27%	4,207,026	3,171,447	75.38
Total	19,224,058	16,032,003	83.40%	13,944,997	10,174,444	72.96%	25,750,500	19,826,404	76.99%	26,004,400	22,408,052	86.17%
Category	96' Work Plan			97' Work Plan			98' Work Plan			99' Work Plan		
	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated
General Restoration	4,133,410	3,739,517	90.47%	3,812,538	3,575,827	93.79%	2,413,185	2,249,944	93.24%	2,396,789	2,298,675	95.91%
Monitoring	1,496,871	1,447,703	96.72%	985,022	950,137	96.46%	930,911	893,146	95.94%	1,282,829	1,218,342	94.97%
Research	13,208,019	12,735,656	96.42%	11,430,632	11,183,953	97.84%	10,781,704	10,363,124	96.12%	7,966,482	7,721,742	96.93%
sub-total	18,838,300	17,922,876	95.14%	16,228,193	15,709,917	96.81%	14,125,800	13,506,214	95.61%	11,646,100	11,238,759	96.50%
Habitat Protection	3,304,100	2,045,292	61.90%	1,260,600	819,070	64.97%	851,400	596,353	70.04%	770,400	601,716	78.10%
Administration	3,418,500	2,979,622	87.16%	2,938,207	2,662,617	90.62%	2,796,300	2,531,047	90.51%	2,495,700	2,323,967	93.12%
Total	25,560,900	22,947,790	89.78%	20,427,000	19,191,604	93.95%	17,773,500	16,633,614	93.59%	14,912,200	14,164,442	94.99%
Category	00' Work Plan			01' Work Plan								
	Adjusted Authorization	Expended/Obligated	Percent Obligated	Adjusted Authorization	Expended/Obligated	Percent Obligated						
General Restoration	938,139	801,568	85.44%	938,400	321,409	34.25%						
Monitoring	1,397,074	1,254,475	89.79%	1,335,666	268,762	20.12%						
Research	6,073,487	5,720,708	94.19%	3,451,200	1,151,712	33.37%						
sub-total	8,408,700	7,776,751	92.48%	5,725,266	1,741,883	30.42%						
Habitat Protection	405,800	362,875	89.42%	256,400	131,747	51.38%						
Administration	2,033,900	1,820,201	89.49%	1,500,100	#REF!	#REF!						
Total	10,848,400	9,959,827	91.81%	7,481,766	#REF!	#REF!						

Exxon Valdez Civil Trustee Council  
Quarterly Report as of December 31, 2000  
Summary

RAFT

WORK PLAN AND ASSOCIATED PROJECTS										
Fiscal Year	Authorized	Adjustments	Adjusted Authorization	EVOS Expenditures	RSA Expenditures	Obligations	Unobligated Balance	EVOS Lapse	Federal Lapse	State Lapse
1992	19,211,000	13,058	19,224,058	13,311,903	2,720,100	0	5,912,155	5,912,155	2,292,119	3,620,036
1993	13,963,000	-18,003	13,944,997	10,174,444		0	3,770,553	3,770,553	1,752,480	2,018,073
1994	25,750,500	0	25,750,500	19,826,404		0	5,924,096	3,712,996	1,336,041	2,376,955
1995	26,004,400	0	26,004,400	22,408,052		0	3,596,348	3,596,348	880,818	2,715,530
1996	25,560,900	0	25,560,900	22,947,790		0	2,613,110	2,613,110	921,208	1,691,902
1997	19,827,600	-5,379	19,822,221	18,605,195		0	1,217,026	1,217,026	536,176	680,850
1998	17,281,600	0	17,281,600	16,250,176		0	1,031,424	1,031,424	377,369	654,055
1999	14,591,200	0	14,591,200	13,869,472		0	721,728	726,422	320,528	405,894
Deobligations									216,740	2,567,359
2000	10,816,100	32,300	10,848,400	9,108,478		851,349	888,573		62,912	825,661
2001	7,702,200	-22,800	7,679,400	461,153		613,120	1,687,393			
<b>TOTAL</b>	<b>180,708,500</b>	<b>-824</b>	<b>180,707,676</b>	<b>146,963,067</b>	<b>2,720,100</b>	<b>1,464,469</b>	<b>27,362,406</b>	<b>22,580,034</b>	<b>8,696,391</b>	<b>17,556,315</b>
<b>OTHER AUTHORIZATIONS</b>			<b>371,711,643</b>	<b>304,697,784</b>		<b>2,677,512</b>	<b>64,336,347</b>	<b>680,715</b>	<b>307,364</b>	<b>373,351</b>
Total Reported Lapse (Through Court Request #45 & Court Notice 5)								25,945,614	9,078,789	16,866,825
Unreported Lapse (1992 through 1999)								987,807	-75,034	1,062,841
Unreported Interest (as of 9/30/00)								3,716,438	1,067,334	2,649,104
Other Revenue (Posters/Symposium Receipts)								33,592	0	0
Total Available to Offset Future Court Requests								4,704,245	992,300	3,711,945
Footnote: The Unobligated Balances have been adjusted to reflect the carry forward of projects. This includes \$2,211,100 in FY 94'.										
Other Authorizations: Includes all large and small parcel acquisitions, the Alutiiq Repository, Prince William Sound and Lower Cook Inlet Archaeological Repository (99154), Construction of the Alaska SeaLife Center, Implementation of the Sound Waste Mgt. Plan (97115), Kenai Habitat Restoration & Recreation (97180, 98180, 99180), Alaska SeaLife Center Fish Pass (97179), Chenega-Area Residual Oiling (96291, 97291, 98291), Kodiak Waste Mgt. Plan (99304), Port Graham Hatchery Reconstruction (99405).										

Exxon Valdez C I Trustee Council  
Quarterly Financial Report As of December 31, 2000  
Category

[illegible]

**Exxon Valdez Oil Spill**  
**For the Period Ending December 31, 2000**  
**Fiscal Year 2001**

Project Number	Category	Project Description	Authorized	Adjustments	Adjusted Authorization	As of 12/31/00 Expenditures	As of 12/31/00 Obligations	Expended/ Obligated	Unobligated Balance
01012	M	Photographic and Acoustic Monitoring of Killer Whales in Prince William Sound and Kenai Fjords	74,500	0	74,500	0	0	0	74,500
01052	G	Community Involvement/Traditional Ecological Knowledge	201,900	0	201,900	0	0	0	201,900
01064	M	Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals in Prince William Sound	22,600	0	22,600	0	0	0	22,600
01100	A	Public Information, Science Management and Administration	1,500,100	0	1,500,100	#REF!	285,405	#REF!	#REF!
01126	H	Habitat Protection and Acquisition Support	256,400	11,700	268,100	113,437	18,310	131,747	136,353
01131	G	Chugach Native Region Clam Restoration	10,500	0	10,500	0	10,005	10,005	495
01144	M	Common Murre Population Monitoring	46,500	0	46,500	0	0	0	46,500
01159	M	Surveys to Monitor Marine Bird Abundance in Prince William Sound during Winter and Summer 2000	25,000	0	25,000	0	0	0	25,000
01163	R	Alaska Predator Ecosystem Experiment in Prince William Sound and the Gulf of Alaska (APEX)	199,600	0	199,600	0	0	0	199,600
01190	R	Construction of a Linkage Map for the Pink Salmon Genome	400,900	0	400,900	145,624	228,065	373,689	27,211
01195	R	Pristane Monitoring in Mussels	55,000	0	55,000	0	0	0	55,000
01210	G	Youth Area Watch	107,000	0	107,000	0	101,220	101,220	5,780
01245	G	Community-Based Harbor Seal Management and Biological Sampling	40,000	0	40,000	10,461	14,462	24,923	15,077
01247	G	Kametlook River Coho Salmon Subsistence Project	22,700	0	22,700	3,907	9,627	13,534	9,166
01250		Project Management	284,300	0	284,300	97,731	4,591	102,322	181,978
01256B	G	Sockeye Salmon Stocking at Solf Lake	24,400	0	24,400	0	0	0	24,400
01273	R	Surf Scoter Life History and Ecology	50,100	0	50,100	14,386	1,028	15,414	34,686
01290	R	Hydrocarbon Database and Interpretation Service	35,000	0	35,000	0	0	0	35,000
01327	R	Pigeon Guillemot Restoration Research at the Alaska SeaLife Center	86,900	0	86,900	0	0	0	86,900
01338	R	Survival of Adult Murres and Kittiwakes in Relation to Forage Fish Abundance	47,200	0	47,200	0	0	0	47,200
01340	M	Toward Long-Term Oceanographic Monitoring of the Gulf of Alaska Ecosystem	72,000	0	72,000	0	0	0	72,000
01341	R	Harbor Seal Recovery: Controlled Studies of Health and Diet	82,200	0	82,200			0	82,200

## For the Period Ending December 31, 2000

## Fiscal Year 2001

Project Number	Category	Project Description	Authorized	Adjustments	Adjusted Authorization	As of 12/31/00 Expenditures	As of 12/31/00 Obligations	Expended/ Obligated	Unobligated Balance
01360	M	The Exxon Valdez Oil Spill: Guidance for Future Research Activities	241,600	0	241,600	0	0	0	241,600
01366	R	Improved Salmon Escapement Enumeration Using Remote Video and Time-Lapse Recording Technology	11,300	0	11,300	1,748	192	1,940	9,360
01371	R	Effects of Harbor Seal Metabolism on Stable Isotope Ratio Tracers	92,900	0	92,900	0	87,863	87,863	5,037
01385	G	Modeling Biodiversity in Kachemak Bay	11,000	0	11,000	5,312	244	5,556	5,444
01389	R	3-D Ocean State Simulations for Ecosystem Applications from 1985-98 in Prince William Sound	142,500	0	142,500	0	60,121	60,121	82,379
01391	M	CIIMMS: Cook Inlet Information/Monitoring System	239,000	0	239,000	19,012	109,574	128,586	110,414
01393	R	Prince William Sound Food Webs: Structure and Change	119,000	0	119,000	0	0	0	119,000
01396	R	Alaska Salmon Shark Assessment	85,000	0	85,000	0	0	0	85,000
01401	G	Assessment of Spot Shrimp Abundance in Prince William Sound	94,400	0	94,400	0	0	0	94,400
01404	R	Archival Tags for Tracking King Salmon at Sea: Migrations, Biology, and Oceanographic Preferences in Prince William Sound	75,000	0	75,000	0	0	0	75,000
01407	M	Harlequin Duck Population Dynamics	67,600	0	67,600	0	0	0	67,600
01423	R	Patterns and Processes of Population Changes in Selected Nearshore Vertebrate Predators	505,400	0	505,400	128,933	1,638	130,571	374,829
01441	R	Harbor Seal Recovery: Effects of Diet on Lipid Metabolism and Health	93,500	0	93,500	11,113	78,077	89,190	4,310
01452	R	Assessing Prey & Competitor/Predators of Pink Salmon Fry	57,600	0	57,600	0	0	0	57,600
01454	R	Evidence and Consequences of Persistent Oil Contamination in Pink Salmon Natal Habitats	103,200	0	103,200	0	0	0	103,200
01455	R	Gulf Ecosystem Monitoring & Research Program Data System	35,700	0	35,700	0	0	0	35,700
01462	R	Effects of Disease on Pacific Herring Population Recovery in Prince William Sound	86,000	0	86,000	10,400	1,045	11,445	74,555
01468	M	FEATS: Fundamental Estimations of Acoustic Target Strength	5,800	0	5,800	0	0	0	5,800
01476	R	Effects of Oiled Incubation Substrate on Pink Salmon Reproduction	94,200	0	94,200	0	0	0	94,200

For the Period Ending December 31, 2000									
Fiscal Year 2001									
Project					Adjusted	As of 12/31/00	As of 12/31/00	Expended/	Unobligated
Number	Category	Project Description	Authorized	Adjustments	Authorization	Expenditures	Obligations	Obligated	Balance
01478	R	Testing Satellite Tags as a Tool for Identifying Critical Habitat (bench fees)	26,800	0	26,800	17,767	227	17,994	8,806
01479	R	Effects of Food Stress on Survival and Reproductive Performance of Seabirds	129,600	0	129,600	0	0	0	129,600
01481	G	Documentary Film on the Oil Spill Impacts on Subsistence Use of Intertidal Resources	111,800	0	111,800	1,865	81,009	82,874	28,926
01492	R	Were Pink Salmon Embryo Studies in Prince William Sound Biased?	62,100	0	62,100	0	0	0	62,100
01513	G	EVOS Exhibit: The Continuing Legacy	50,300	0	50,300	0	47,575	47,575	2,725
01534	R	P4501A Induction Comparison of Cytochromein Blood and Liver Cells of Sea Otters	19,900	0	19,900	0	0	0	19,900
01535	G	EVOS TC Restoration Program Final Report	73,500	0	73,500	19,183	1,568	20,751	52,749
01538	R	Northwest Gulf of Alaska Herring Stock Identification	10,100	0	10,100	61,500	0	61,500	-51,400
01543	M	Evaluation of Oil Remaining in the Intertidal from the Exxon Valdez Oil Spill	477,200	-34,500	442,700	5,743	52	5,795	436,905
01550		Alaska Resources Library and Information Services	129,100	0	129,100	18,558	1,969	20,527	108,573
01551	R	Checklist and Distributional Analysis of Marine Algal Species Collected as Vouchers Under CH1A	65,800	0	65,800	0	0	0	65,800
01552	R	Exchange Between Prince William Sound and the Gulf of Alaska	105,700	0	105,700	0	0	0	105,700
01555	R	Can Stress Hormones Be Used as an Indication of Food Availability and Reproductive Performance? An Experimental Approach	18,900	0	18,900	0	0	0	18,900
01558	R	Harbor Seal Recovery (includes bench fees)	280,200	0	280,200	144,018	115,406	259,424	20,776
01599	R	Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources in Benthic Sediments of the Spill Area	10,500	0	10,500	0	0	0	10,500
01610	G	Kodiak island Youth Area Watch	61,800	0	61,800	0	0	0	61,800
01630	R	Planning for Long-term Research and Monitoring Program	263,400	0	263,400	16,001	26,560	42,561	220,839
		Total	7,702,200	-22,800	7,679,400	461,153	613,120	1,074,273	1,687,393





A. SUMMARY OF APPRAISAL NO. 3060

1. ADL NO: n/a 2. SIZE: 2,191 acres 3. APPLICANT: Proposed purchase of lands owned by the Karluk IRA Council  
4. LOCATION: Karluk River, Sturgeon River, Grant Lagoon, and Halibut Bay on Kodiak Island  
5. LEGAL DESCRIPTION: long legal in report  
6. INTEREST APPRAISED: Surface estate under ANCSA, subject to 22g  
7. APPRAISED BY: MacSwain & Associates  
8. DATE of REPORT: 7-7-2000 9. DATE of VALUE: 7-5-2000 10. APPRAISED VALUE: \$2,200,000

## B. SUMMARY OF REVIEW

1. DATE of REVIEW: 12-7-2000 & 1-26-2000 2. REVIEWER'S CLIENT: DNR ☒ Other EVOS Trustee Council  
3. INTENDED USERS of the REVIEW: DNR ☒ General Public ☒ Other EVOS Trustee Council  
4. INTENDED USE of the REVIEW: Establish purchase price  
PURPOSE of REVIEW: Evaluate for Technical Compliance with DNR Instructions & USPAP ☒  
Evaluate for Technical Compliance with UASFLA ☒ Develop Independent Estimate of Value ☐  
Other: Evaluate for technical compliance with EVOS Trustee Council Appraisal Instructions  
5. SCOPE OF REVIEW: I performed a field review ☒ I did not perform a field review ☐  
Data and Information Considered in Addition to that Contained in the Report: None ☒ See Sections C thru F ☐  
Special Assumptions & Limiting Conditions for this review: None ☒ See Section G ☐  
Proofread DNR data entry: Yes ☒ No ☐ Related appraisals reviewed: None  
6. RESULTS OF REVIEW: Approved ☒ Approved Value: \$2,200,000 Not Approved ☐

C. COMPLETENESS OF APPRAISAL MATERIAL WITHIN SCOPE OF WORK APPLICABLE TO THE  
ASSIGNMENT/CONFORMANCE with APPRAISAL INSTRUCTIONS: Good

## D. ADEQUACY and RELEVANCE of APPRAISAL DATA and PROPRIETY OF ADJUSTMENTS: Adequate

## E. APPROPRIATENESS OF APPRAISAL METHODS and TECHNIQUES: Appropriate

## F. ANALYSES, OPINIONS, and CONCLUSIONS ARE APPROPRIATE and REASONABLE, except:

## G. REVIEWER'S ASSUMPTIONS AND LIMITING CONDITIONS

1. This review is based on data and information contained in the appraisal report as well as any additional data from other sources that is identified in this review.
2. The reviewer assumes that the data and information in the appraisal are factual and accurate.
3. The reviewer reserves the right to consider any additional data or information that may subsequently become available, and to revise an opinion or conclusion, if such data and information warrant a revision.
4. All assumptions and limiting conditions contained in the appraisal report are part of this review unless otherwise stated.



## REVIEW APPRAISER'S CERTIFICATION APPRAISAL NO. 3060

I certify that, to the best of my knowledge and belief:

- the facts and data reported by the reviewer and used in the review process are true and correct.
- the analyses, opinions, and conclusions in this review report are limited only by the assumptions and limiting conditions stated in this review report, and are my personal, unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and I have no personal interest or bias with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- my compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or use of, this review.
- my analyses, opinions, and conclusions were developed and this review report was prepared in conformity with the Uniform Standards of Professional Appraisal Practice.
- I did ☒ did not ☐ personally inspect the subject property of the report under review.
- Richard H. Johnson, USFWS Regional Review Appraiser provided significant professional assistance to the person signing this review report.

Reviewed by

  
Judy A. Robinson, SRWA

Date

1-26-2001

I concur

  
Richard H. Johnson

Date

2-6-01

RECEIVED

FEB 06 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

cc:

Carol Fries  
Alex Swiderski  
Molly McCammon  
Richard H. Johnson

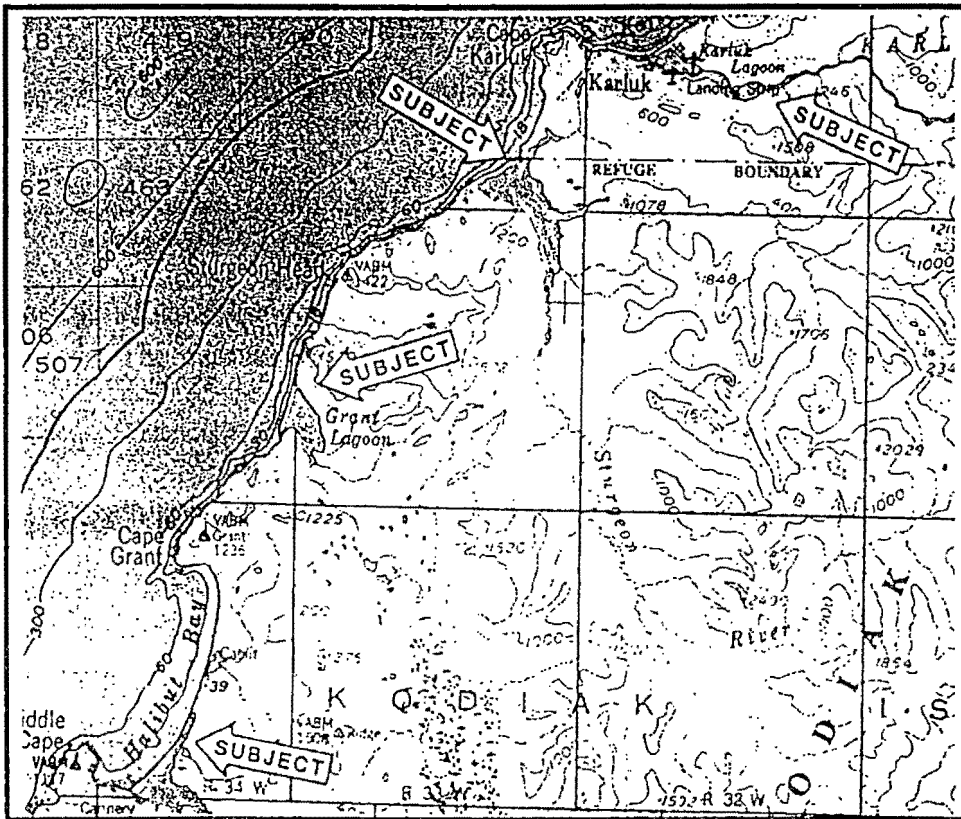
2-6-01  
1-31-01

# MACSWAIN ASSOCIATES

4401 Business Park Boulevard, Suite 22  
Anchorage, Alaska 99503  
Ph 907.561.1965 Fax 907.561.1955

## SELF-CONTAINED APPRAISAL REPORT

### Market Value Estimate of Remote Kodiak Land



2,191 Acres Located in  
the Karluk River,  
Sturgeon River, Grant  
Lagoon, and Halibut Bay  
Market Areas  
Karluk, Alaska

Valuation Date  
June 5, 2000

File No.  
00-505

### Submitted To:

Judy Robinson, Review Appraiser  
State of Alaska, Department of Natural Resources  
Division of Mining, Land, and Water  
550 West 7th Avenue, Suite 650  
Anchorage, Alaska 99501-3576

RECEIVED  
JAN 22 2001

RECEIVED  
JUL 10 2000

## MacSwain Associates

4401 Business Park Blvd., Suite 22  
Anchorage, Alaska 99503  
Telephone: 907-561-1965  
Facsimile: 907-561-1955  
E-mail: macswain@alaska.net

July 7, 2000

Judy Robinson, SRWA  
Review Appraiser  
State Department of Natural Resources  
550 West 7th Avenue, Suite 650  
Anchorage, Alaska 99501-3576

Re: Karluk River Acquisition (ASPS 10-00-072)  
2,191 Acres of Remote Land Located on Kodiak Island

Dear Ms. Robinson:

Attached is a **Complete, Self-Contained** appraisal report that analyzes the above referenced remote land located on the west-side of Kodiak Island near the community of Karluk, Alaska. The purpose of the appraisal is to estimate the market value of surface estate entitlements as defined by ANCSA. We prepare this report with the intent of complying with the *Uniform Appraisal Standards for Federal Land Acquisitions* (UASFLA) and the *Uniform Standards of Professional Appraisal Practice* (USPAP). As instructed, the appraisal also complies with the following requirements:

- ☐ Exxon Valdez Oil Spill Trustee Council (EVOSTC) appraisal specifications dated April 21, 1994;
- ☐ *Interagency Land Acquisition Conference Position Paper* dated April 14, 1995; and,
- ☐ Memorandum from Paul Tittman, Chief Appraiser, United States Forest Service dated October 12, 1995.

Based on our highest and best use analysis, we perform independent analyses and valuations of the 1,008 acres fronting the Karluk River and the remaining 1,183 acres fronting the Sturgeon River, Grants Lagoon, and Halibut Bay. The following report provides the data, reasoning, and analyses that develop an opinion of value. In conclusion, we estimate the market value of appraised land, as of June 5, 2000, as follows:

<b>1,008-Acre Karluk River Land</b>	<b>\$1,500,000</b>
<b>1,183-Acre Sturgeon River, Grants Lagoon, and Halibut Bay Land</b>	<b>\$ 700,000</b>
<b>Market Value of Appraised Land:</b>	<b>\$2,200,000</b>

## **MacSwain Associates**

We use the sales comparison approach to value the appraised land and rely on qualitative adjustments to measure differences between the comparable sales and the subject. The relative comparison grids facing pages 53 and 54 of this report summarize our analyses that conclude with an estimate of value. We premise our opinion of value on an exposure period of one to three years. We direct your attention to the Assumptions and Limiting Conditions for an explanation of the restrictions and limitations of this report. If you have questions regarding our analysis or conclusions, please contact us at our office.

Respectively submitted,



---

Steve MacSwain, MAI – AA 42



---

Dan Shantz – AA 47

We certify that, to the best of our knowledge and belief:

- ☐ The statements of fact contained in this report are true and correct and no important facts have been withheld.
- ☐ The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and they are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- ☐ We have no present or prospective interest in the property that is the subject of this report, and we have no personal interest with respect to the parties involved.
- ☐ We have no bias with to the property that is the subject of this report or to the parties involved with this assignment.
- ☐ Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- ☐ Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- ☐ Our analyses, opinions, and conclusions were developed, and the report has been prepared, in conformity with UASFLA and the USPAP. As agreed by the State Department of Natural Resources, we depart from the EVOSTC appraisal specifications that require a personal inspection of each comparable land sale.
- ☐ Dan Shantz in the accompaniment of Judy Robinson made a personal inspection of the appraised land that is the subject of this report. The date of inspection was June 5, 2000, and the inspection was performed by aerial over-flight and on-site field inspections. Steve MacSwain had previously inspected the appraised land with the most recent date occurring in July 1998. Excluding Land Sale No. 4, Dan Shantz or Steve MacSwain has inspected each of the primary land sales by aerial overflight or on-site observations. Although the appraisers did not perform a site-specific inspection of Land Sale No. 4, they have inspected land fronting the Alagnak River during previous assignments.
- ☐ No one provided significant professional assistance to the persons signing this report.

**MacSwain Associates**

- ☐ The landowner's representative, Mr. Walt Ebell, attorney for Karluk I.R.A. Council, declined the invitation to accompany the appraisers during the property inspection.
- ☐ As of the date of this report Steve MacSwain, MAI has completed the requirements of the continuing education program of the Appraisal Institute. Steve MacSwain (AA 42) and Dan Shantz (AA 47) are certified General Real Estate Appraiser in the State of Alaska.



Steve MacSwain, MAI



Dan Shantz



## Assumptions and Limiting Conditions

This appraisal is subject to the following general assumptions and limiting conditions.

- ☐ We assume no responsibility for the legal descriptions provided or for other matters pertaining to legal or title considerations. We assume title to the appraised parcels is marketable unless otherwise stated.
- ☐ We appraise the each parcel free and clear of all liens or encumbrances unless otherwise stated.
- ☐ We believe the information furnished by others is reliable, but we do not guarantee its accuracy.
- ☐ We assume all engineering studies are correct. We believe all maps, plot plans, and other illustrative material are accurate. We include these exhibits only to help the reader visualize the appraised parcels.
- ☐ We assume there are no hidden or unapparent conditions of each lot that render it more or less valuable. We assume no responsibility for such conditions or for obtaining the engineering studies that may be required to discover them.
- ☐ We assume the appraised lots are in full compliance with all applicable federal, state, and local environmental regulations and laws unless the lack of compliance is stated, described, and considered in the appraisal report.
- ☐ Possession of this report, or a copy thereof, does not carry with it the right of publication.
- ☐ The appraisers are not required to give consultation, testimony, or attend court proceedings with reference to the subject lots without prior arrangements.
- ☐ The appraisers acknowledge that this appraisal report will be made available for public review upon request.
- ☐ We did not observe any hazardous material or other type of environmental contamination on the appraised lots. Furthermore, we do not have any knowledge that such substances exist. However, the presence of these substances may affect the value of the property.

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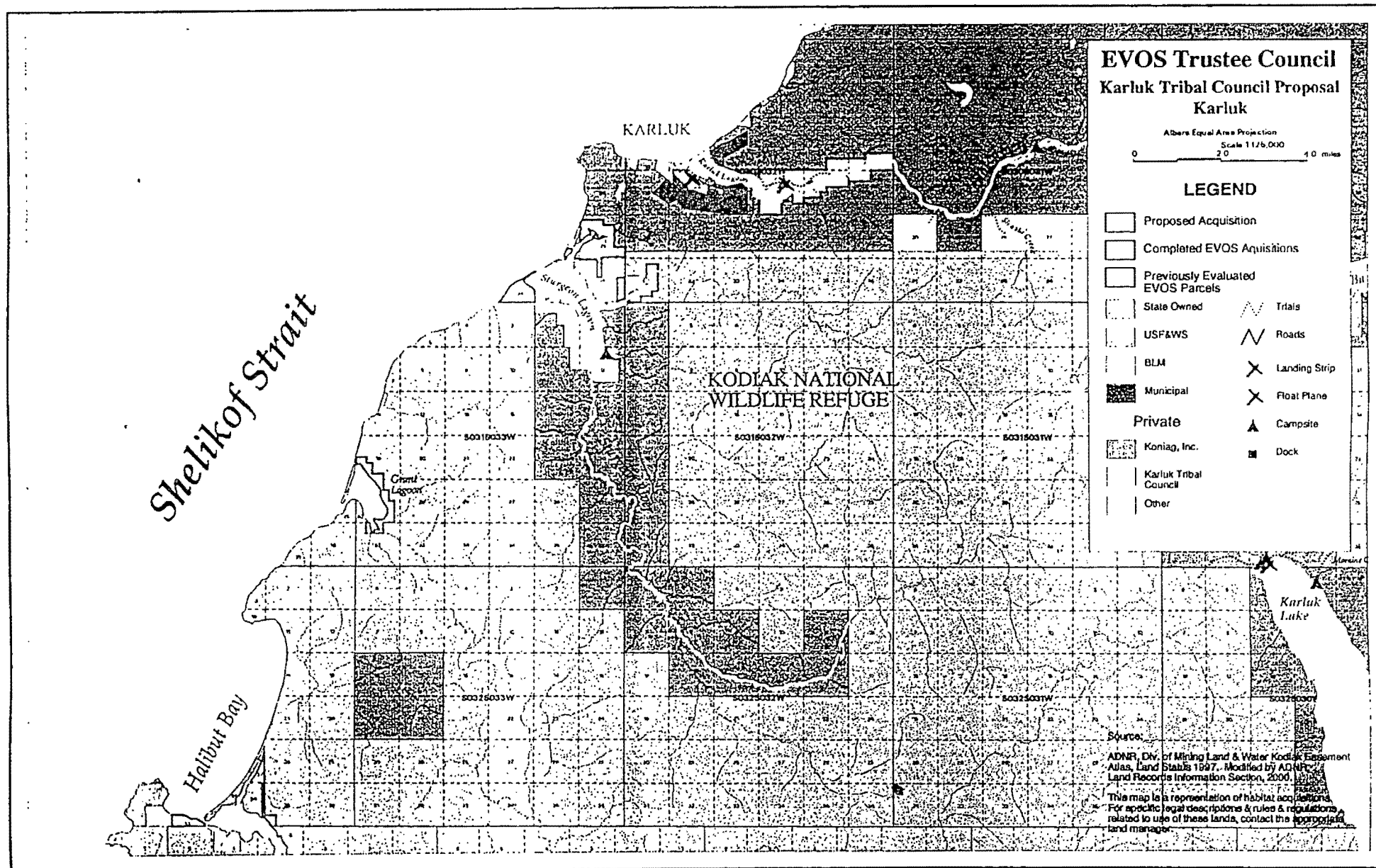
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**Salient Facts and Conclusions**

<b>Property Type/Identification:</b>	Remote land located on Kodiak Island
<b>Purpose of Appraisal:</b>	Estimate market value of the appraised land
<b>Property Rights Appraised:</b>	Surface estate as defined by ANCSA
<b>Location:</b>	Karluk River, Sturgeon River, Grant Lagoon, and Halibut Bay on the west-side of Kodiak Island in proximity of Karluk, Alaska
<b>Property Owner:</b>	Karluk I.R.A. Council
<b>Land Area:</b>	Karluk River Land: 1,008 acres Sturgeon River et al. Land: 1,183 acres Total Land Area: 2,191 acres
<b>River and Ocean Frontage:</b>	Karluk River Land: 6± miles river frontage Sturgeon River et al. Land: 3.5± miles river frontage and 6.2± miles of ocean frontage
<b>Access:</b>	Boat, floatplane, helicopter, or foot-trail
<b>Topography:</b>	Varies from level to relatively steep slope
<b>Zoning:</b>	Conservation (C) per Kodiak Island Borough
<b>Improvements:</b>	None
<b>Highest and Best Use:</b>	Karluk River Land: Recreation Sturgeon River et al. Land: Recreation
<b>Date of Value:</b>	June 5, 2000
<b>Date of Report:</b>	July 7, 2000
<b>Exposure Period:</b>	1 to 3 years

<b>Market Value Estimate:</b>	
Karluk River Land	\$1,500,000
Sturgeon River, Grant Lagoon, Halibut Bay Land	\$ 700,000
<b>Market Value of Appraised Land</b>	<b>\$2,200,000</b>



**Chapter 1: Premises of the Appraisal****Overview**

This appraisal report analyzes 2,191 acres of vacant land located on the west-side of Kodiak Island fronting the Karluk River, Sturgeon River, Halibut Bay, and Grant Lagoon. As illustrated on the facing page, the subject consists of eight non-contiguous land areas. Based on our highest and best use analysis, we determined that the land paralleling the Karluk River has a more productive recreation use. Therefore, we value the 1,008-acre Karluk River land independent of the remaining 1,183 acres that front the Sturgeon River, Grant Lagoon, and Halibut Bay. Despite independent analysis, we estimate the market value the entire ownership.

The land located in Halibut Bay, Grant Lagoon, and the south portion of the Sturgeon River is within the boundaries of the Kodiak National Wildlife Refuge (KNWR). In contrast, the land paralleling the Karluk River and the north portion of the Sturgeon River is outside refuge boundaries. The Karluk I.R.A. Council (KIRAC) owns surface estate entitlements of the appraised land.

We prepare a **Complete, Self-Contained** report that intends to comply with the *Uniform Appraisal Standards for Federal Land Acquisitions* (UASFLA) as well as the *Uniform Standards of Professional Appraisal Practice* (USPAP). As instructed, the appraisal also complies with the following requirements:

- ☐ Exxon Valdez Oil Spill Trustee Council (EVOSTC) appraisal specification dated April 21, 1994;
- ☐ *Interagency Land Acquisition Conference Position Paper* dated April 14, 1995; and,
- ☐ Memorandum from Paul Tittman, Chief Appraiser, United States Forest Service dated October 12, 1995.

**Location and  
Identification of  
Appraised Land**

The appraised land is located on the west-side of Kodiak Island within an 18-mile radius of the rural community of Karluk. Land paralleling the banks of the Karluk River contains 1,008 contiguous acres that extend some three miles east from Karluk Lagoon. The Sturgeon River land consists of 737 non-contiguous acres that offer both river and ocean frontage. The 255-acre Grant Lagoon land fronts the east shoreline of a landlocked lagoon. Land located in Halibut Bay consists of 191 non-contiguous acres that front the bay as well as an inner lagoon.

**Purpose and  
Intended Use of the  
Appraisal Report**

The purpose of this report is to estimate the market value of the appraised land. The State of Alaska, Department of Natural Resources (DNR) engaged us with the understanding that our report will be used to facilitate a potential acquisition by the EVOSTC.

**Definition of Market  
Value**

The UASFLA and USPAP definitions of market value cited below apply to the analysis and valuation of the subject land.

***UASFLA Definition***

*The amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy.<sup>3</sup>*

***USPAP Definition***

*The most probable price which a property will bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*

- a. buyer and seller are typically motivated;*
- b. both parties are well informed or well advised, and acting in what they consider to be their best interest;*
- c. a reasonable time is allowed for exposure in the open market;*
- d. payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and*
- e. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.<sup>4</sup>*

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<sup>3</sup> *Uniform Appraisal Standards for Federal Land Acquisitions*, by the Interagency Land Acquisition Conference, 1992, p. 3.

<sup>4</sup> *Uniform Standards of Professional Appraisal Practice, 2000 Edition*, by the Appraisal Standards Board of the Appraisal Foundation, p. 160.

## **MacSwain Associates**

<b>Property Rights Appraised</b>	We appraise surface estate entitlements as defined in ANCSA. <sup>5</sup> Significantly, the appraised land located within the boundaries of the KNR are subject to Section 22(g) of ANCSA that pertains to the first right of refusal and land use regulations. <sup>6</sup>
<b>Property Owner</b>	Based on a land status report prepared by Land Field Services, Inc., the property owner is the Karluk I.R.A. Council.
<b>Legal Description</b>	We enclose in the addenda a copy of the land status report prepared by Land Field Services, Inc. that provides a legal description of the appraised land.
<b>Date of Value</b>	June 5, 2000
<b>Date of Report</b>	July 7, 2000
<b>Owner Contact</b>	We informed KIRAC representative Walt Ebell that DNR engaged MacSwain Associates to appraise the subject land. Mr. Ebell declined to accompany the appraisers' property inspection. DNR accepted the invitation and Judy Robinson accompanied the appraisers during the inspection.
<b>Discussion of Property Inspection</b>	Dan Shantz and Judy Robinson inspected the appraised land by aerial over-flight and on-site observations on June 5, 2000. Low tide levels prevented an on-site inspection of the land located in the Sturgeon River area. However, Dan Shantz and Steve MacSwain have performed on-site inspections of this land during previous appraisal engagements. Our inspection of the appraised land provided the data necessary to perform the valuation process.

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<sup>5</sup> Surface estate is defined as the fee simple interest less developable minerals, which includes sand and gravel.

<sup>6</sup> Discussion of Section 22(g) of ANCSA is contained in Chapters 3 and 5.



**Reasonable Exposure  
Time**

A reasonable exposure time is a function of price, time, and anticipated use. We estimate that a reasonable exposure time to consummate a sale of the appraised land, as of the effective valuation date, is one to three years. We base this opinion on data gathered from the verification of the land sales used in this report as well as interviews with participants in the remote Alaska land market. The primary land sales used in our comparative analysis had an exposure time that range from three months to eight years. Some had an extended exposure time because of unrealistic asking prices that alienated informed market participants. After lowering the asking price, culmination of a sale occurred. Thus, a reasonable exposure time is less than the actual marketing period. Land Sale Nos. 5 and 6 discussed in Chapter 6 are examples of an unreasonable asking price that affected exposure time.

Our analysis of other remote land sales also indicated a significant exposure time that ranged from six months to six years. Price, supply, and demand dynamics affected exposure time. A broker that specializes in remote land informs clients to expect one to two years of marketing if competitively priced.<sup>7</sup>

In conclusion, a scarcity of remote land sales makes a statistical analysis impossible. Furthermore, demand for remote land is scarce and seller price expectations are often unreasonable. However, a majority of the remote land sales that we analyzed had an exposure time of one to three years when competitively priced. Based on this data, we estimate a reasonable exposure time for the appraised land is one to three years.

**Sale History of  
Appraised Property**

Koniag, Inc. conveyed title by Quitclaim Deed to Karluk I.R.A. Council in January 1986. This conveyance does not represent a sale of the appraised land.

**Competency of  
Appraisers**

The appraisers have knowledge and experience in appraising remote land on Kodiak Island as well as other Alaska markets. Engagements include oceanfront and upland parcels that range from five to 100,000± acres. The reports were prepared with the intent of complying with UASFLA and USPAP. Clients include government agencies, special interest groups, Native corporations, and private parties. The

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<sup>7</sup> Bernie Vockner, broker Remote Properties, Inc.

appraisers have also provided expert witness testimony pertaining to the valuation of remote Kodiak land.

**Scope of Appraisal**

Data collection and confirmation is an important component of the appraisal process. We prepare a self-contained report, although we retain extensive data used as secondary market support on file. We rely on data obtained from public agencies, private parties, brokers, appraisers, title company records, and company files to perform our analyses. Confirmation of sale data is with buyers, sellers, brokers, or other knowledgeable third parties. Excluding a recent land sale fronting the Alagnak River, the appraisers inspected the primary sales used in the comparative analyses. However, the appraisers are familiar with the Alagnak River market area from other engagements and reviewed photographs of this sale. Appraisal instructions permitted departure from EVOSTC appraisal specifications regarding the inspection of comparable sales.

In preparing the market analysis, property description, and highest and best use analysis, we use publications from the following data sources.

- ☐ Alaska Department of Community and Economic Development
- ☐ Alaska Department of Labor and Workforce Development
- ☐ Alaska Department of Fish and Game
- ☐ Alaska Department of Natural Resources
- ☐ City of Kodiak
- ☐ Kodiak Island Borough
- ☐ Kodiak National Wildlife Refuge
- ☐ U.S. National Park Service
- ☐ U.S. Fish and Wildlife Service
- ☐ U.S. Forest Service
- ☐ U.S. Geological Service
- ☐ Bureau of Land Management
- ☐ Bureau of Indian Affairs
- ☐ Exxon Valdez Oil Spill Trustee Council

Regarding land use feasibility and comparable sales analysis, we collected data from the sources listed on the following page.

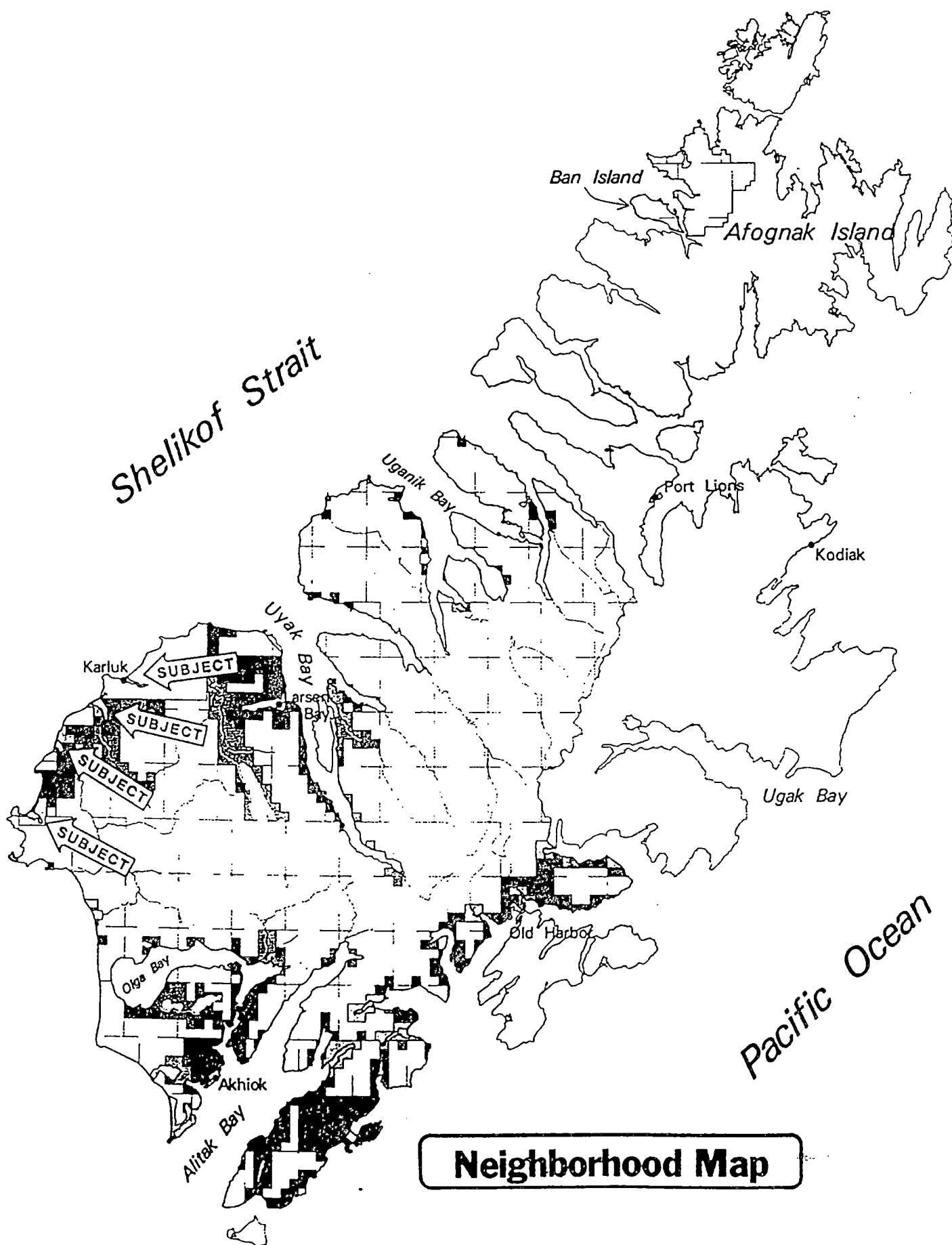
- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> Judy Robinson | Appraiser/Dept. of Natural Resources |
| <input type="checkbox"/> Jim Smith     | Appraiser/USFS                       |
| <input type="checkbox"/> Rick Johnson  | Appraiser/USFWS                      |
| <input type="checkbox"/> Bob Ameen     | Appraiser/Wasilla                    |

## MacSwain Associates

<input type="checkbox"/> Steve Carlson	Appraiser/Anchorage
<input type="checkbox"/> Frank King	Appraiser/Anchorage
<input type="checkbox"/> Al Olson	Appraiser/Anchorage
<input type="checkbox"/> Tom Dunagan	Appraiser/Anchorage
<input type="checkbox"/> Charles Horan	Appraiser/Sitka
<input type="checkbox"/> Bill Roberts	Appraiser/Kodiak
<input type="checkbox"/> Pat Carlson	Assessor/Kodiak Island Borough
<input type="checkbox"/> Shane Horan	Assessor/Kenai Peninsula Borough
<input type="checkbox"/> Jenness Burns	Appraiser/Bureau of Indian Affairs
<input type="checkbox"/> Brad Meiklejohn	The Conservation Fund
<input type="checkbox"/> Randy Hagenstein	The Nature Conservancy
<input type="checkbox"/> Steve Planchon	Mental Health Land Trust
<input type="checkbox"/> Ken Gain	Broker/Anchorage
<input type="checkbox"/> Bernie Vockner	Broker/Anchorage
<input type="checkbox"/> Winn Moser	Broker/Anchorage
<input type="checkbox"/> Kim Paisley	Broker/Anchorage
<input type="checkbox"/> Bonnie Aulabaugh	Broker/Kodiak
<input type="checkbox"/> Sharlene Sullivan	Broker/Kodiak
<input type="checkbox"/> Grant Shields	Broker/Kodiak
<input type="checkbox"/> Linden O'Toole	Broker/Cordova
<input type="checkbox"/> Tim Hurley	Owner/Western Alaska Title Company

### Summary of Appraisal Methodology

We employ the sales comparison approach to estimate the market value of the appraised land. Neither the cost nor the income capitalization approach reflects market behavior for this property type. We use qualitative techniques to measure differences between the comparable sales and the subject. A relative comparison grid that rates various elements as superior, inferior, or similar summarizes our analysis. Dan Shantz and Steve MacSwain perform the relative comparative analysis. Enclosed in the addenda are additional data and mapping pertaining to the sales that we rely on to perform the comparative analyses.



program) and levies real estate taxes. FWS<sup>10</sup> manages refuge land and interacts with landowners to generate cooperative land use agreements. State Fish and Game regulates and manages commercial and private Kodiak fisheries.

Outside of the City of Kodiak, primary access is boat or aircraft. However, public roads extend from the City of Kodiak to Pasagshak Bay (southeast) and Anton Larsen Bay (northwest). The State ferry system also provides seasonal transport to the City of Kodiak. Kodiak airport serves as a regional hub with scheduled flights available to the rural communities. Clearly, infrastructure is sparse outside of the City of Kodiak, which increases the cost of transport, goods, and services.

#### **Existing Land Use**

We also discuss land use potential in our highest and best use analysis contained in Chapter 5. Principal uses and activities of remote land in the Kodiak market area are commercial fishing, logging, commercial or private recreation, subsistence, and wildlife habitation. Commercial fishing requires relatively small land areas that have strategic locations. Development ranges from seafood processing facilities to staging areas with sheds/cabins. Logging operations are concentrated on Afognak Island and encompass large areas served by camps, roads, and transfer sites. Commercial and private recreation requires smaller land areas for development, but often use adjoining public land to compliment their use. Subsistence gathering and wildlife habitation lack the economic incentives that drive alternative land use. They require relatively large land areas, typically, owned by public agencies or Native corporations.

#### **Kodiak Economy**

Commercial fishing and fish processing are the mainstay of the Kodiak economy. Kodiak ranks second in Alaska seafood volume with about 360 million pounds valued at nearly \$80 million. Intrinsically linked to the Kodiak fisheries is the Coast Guard base that has an enlisted payroll of \$41 million. The base has a population of 2,300 personnel and dependents and employs 100 additional civilians. Furthermore, it generates about \$15 million annually in construction and maintenance contracts for local vendors.

Logging is the other major natural resource that contributes to the Kodiak area economy. However, this industry, which peaked in the

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<sup>10</sup> U.S. Fish and Wildlife Service.



mid-1990, is in a state of decline because of the recession afflicting the Asian markets. Native corporation land on Afognak Island is the principal source of merchantable timber, although available supply declined dramatically with the acquisition of land and/or timber rights by the EVOSTC. Thus, the contribution of the logging industry to the Kodiak economy will diminish when the timber market rebounds.

Government is the other important component of the Kodiak economy. Despite downsizing in recent years, this economic sector is not as volatile as those associated with natural resource development. Therefore, government helps stabilize an economy that is prone to significant fluctuation. In addition, the \$38 million Kodiak Launch Complex (NASA funded) will stimulate growth in government and services if launches proceed as planned for telecommunication and research purposes.

Tourism and commercial recreation are evolving as growth industries, but they are seasonal and contribute less than \$25 million per year to the economy. However, Kodiak offers both the habitat and scenic environment that attracts visitation. In fact, the Karluk and Ayakulik Rivers attract significant sport fishing interest that provides an economic stimulus to air charter operators, transporters, and guides. We anticipate continued exploitation of these resources as well as the other components of Kodiak tourism.

#### Southwest Kodiak District

The Southwest Kodiak district, which encompasses the appraised land, extends from Uyak Bay on the north to the Ayakulik River on the south. Like most of the Kodiak market area, this district is primarily remote wilderness land owned by the State, federal government, or Koniag Inc. Subsistence gathering, sport fishing, hunting, and wildlife habitation are the principal land activities. Economic uses of the land include hunting/fishing lodge, fish camp, staging for commercial fishing, recreation cabin, and rural homesite. We anticipate similar land use activity as well as sparse development to characterize the Southwest Kodiak district.

The communities of Larsen Bay and Karluk are the principal population centers in the Southwest district with 137 and 41 residents, respectively. Larsen Bay is an incorporated 2nd Class City with approximately 44 occupied single-family dwellings. It has a protected harbor that allows floatplane access as well as a state-maintained airport with regular service to Kodiak. The local economy is fishing-dependent with a seasonal fish processing plant (Kodiak Salmon Packers) representing the primary employer. In addition, 17

commercial fish permit holders reside in Larsen Bay. Most residents supplement food sources with traditional subsistence activities. Public water and sewer systems serve the community with a new water treatment plant and 200,000 gallon storage tank planned in 2001. An 18-student public school and a health clinic are also located in Larsen Bay.

Karluk is an unincorporated community that has a declining population. In fact, school enrollment fell below the minimum student level causing closure in 1999. Funding for reconstruction of the State-maintained airport in 2000 will improve daily flight service from Kodiak. Monthly barge service from Kodiak provides goods that supplement subsistence hunting and fishing activities. Public water and sewer systems constructed in 1978 serve all occupied dwellings. The economy is fishing-related and complimented by public sector employment. We expect a continued decline in the Karluk population with most residents participating in subsistence activity.

**Southwest Market  
District Real Estate  
Overview**

We provide additional data pertaining to the remote Kodiak land market in Chapter 4, including a discussion of land acquisitions by the EVTOSC. The primary real estate activity of remote land in the Southwest market district is 10-acre recreation lots located in Uyak and Zachar Bays. Since 1995, approximately 25 lots sold to private parties that represent arm's length sales. Sale prices range from \$10,000 to \$20,000. In addition, two Native allotments sold in the past 10 years.<sup>11</sup>

During the 1985-1994 period, Ayakulik Associates activity marketed about 45 former patented "cannery sites" in the Southwest Kodiak market district. Approximately 20 percent of these sites sold before dissolution of the partnership. Most of the arm's length sales were sites located in the Uyak Bay area. Demand for sites exposed to Shelikof Strait were described as marginal.<sup>12</sup>

FWS and The Conservation Fund acquired about 20 Native allotments in Southwest Kodiak over the past five years, including 10 within the Sturgeon River, Grant Lagoon, and Halibut Bay market districts. The acquisition price, which was based on a BIA appraisal, ranged from \$800 to \$2,300 per acre. Moreover, the prices paid for land fronting

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<sup>11</sup> We describe and analyze these sales in Chapter 6.

<sup>12</sup> Discussions with Ken Hertz, representative of partnership.

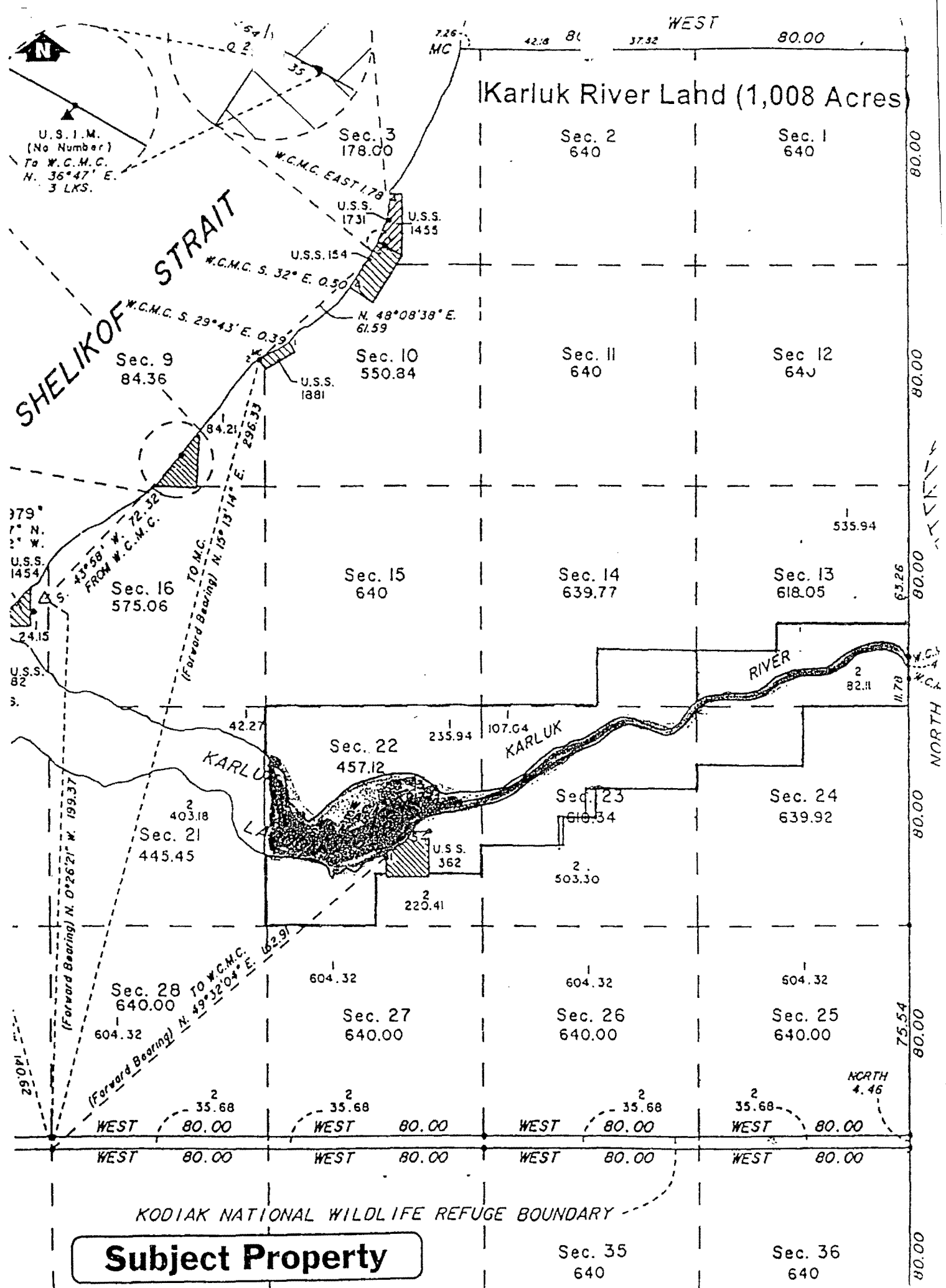


the Sturgeon River, Grant Lagoon, and Halibut Bay were less than \$1,200 per acre. The significance of these acquisitions from a market perspective is a reduction in the available supply of private land.

**Summary of Kodiak  
Real Estate Market**

As a whole, real estate market activity is sparse with limited available supply and a scarcity of demand. Moreover, the principal component of economic demand is recreation use, but sale activity indicates that recreation demand for remote land is declining. Excluding Uyak Bay, there are about 20± land sales by private parties in the entire Kodiak market area the past decade. These purchases represent recreation lots ranging from one to 275 acres. The most active market participants in recent years are special interest groups, EVOSTC, and Native corporations that intend to preserve the land for subsistence and wildlife habitation. These acquisitions diminish the available supply of remote land.

Based on the sale data analyzed, we determined that price stability characterizes the remote Kodiak real estate market. We anticipate a similar trend in the future because of general equilibrium between available supply and private party demand.



## Chapter 3: Property Description and Analysis

### Overview

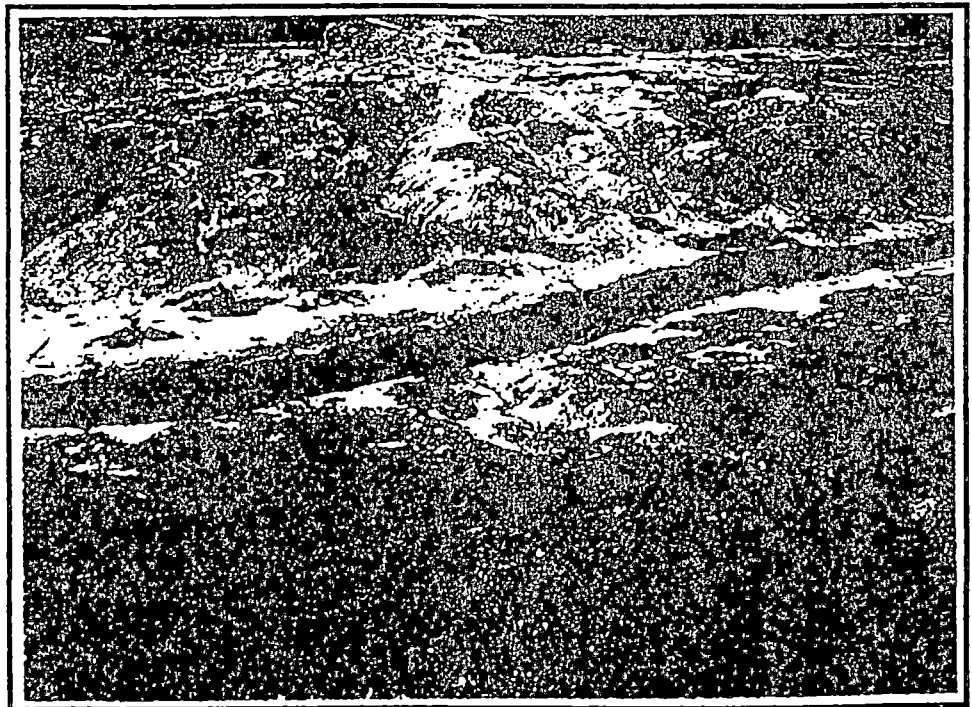
The 2,191-acre appraised land consists of eight non-contiguous parcels located in four distinct geographic areas in the Southwest Kodiak market district. Thus, we delineate the description and analysis that follow by location features. The four locations are the Karluk River, Sturgeon River, Grant Lagoon, and Halibut Bay. The appraised land is within the Kodiak Island Borough and subject to their land use regulations. Land paralleling the Karluk River and the north portion of the Sturgeon River is outside of the KNWR. Conversely, the remaining appraised land is within refuge boundaries and subject to Section 22(g) of ANCSA.

Our property inspection, USGS maps, Master Title Plats, and cadastral survey maps are the principal data sources we use to describe the subject land. Facing maps show boundaries while the photographs that precede each description illustrate important physical characteristics.

### Karluk River Photographs

*Date: June 5, 2000*

*Taken By: Dan Shantz*



*Northeast view of the Karluk River taken near the west-end of the property (note fish weir in midpoint of photograph)*

Karluk River  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz



*West view along the Karluk River taken from the east end of the property*

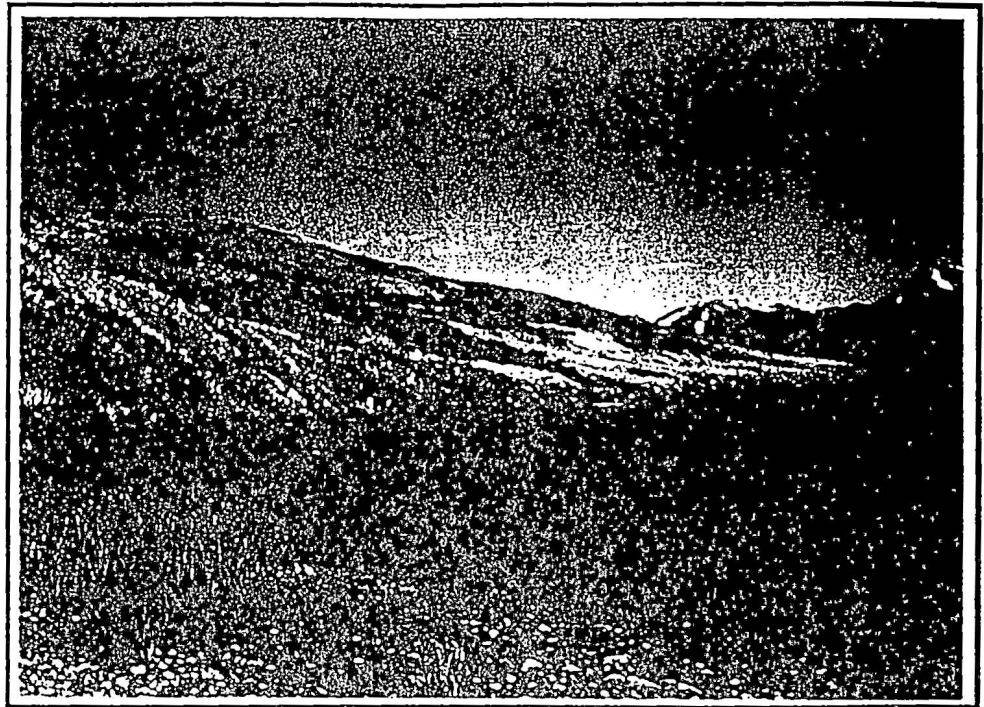


*East view along the Karluk River taken from the west end of the property*

Karluk River  
Photographs

*Date: June 5, 2000*

*Taken By: Dan Shantz*



*East view along the north bank of the Karluk River taken near the  
west-end of the property*

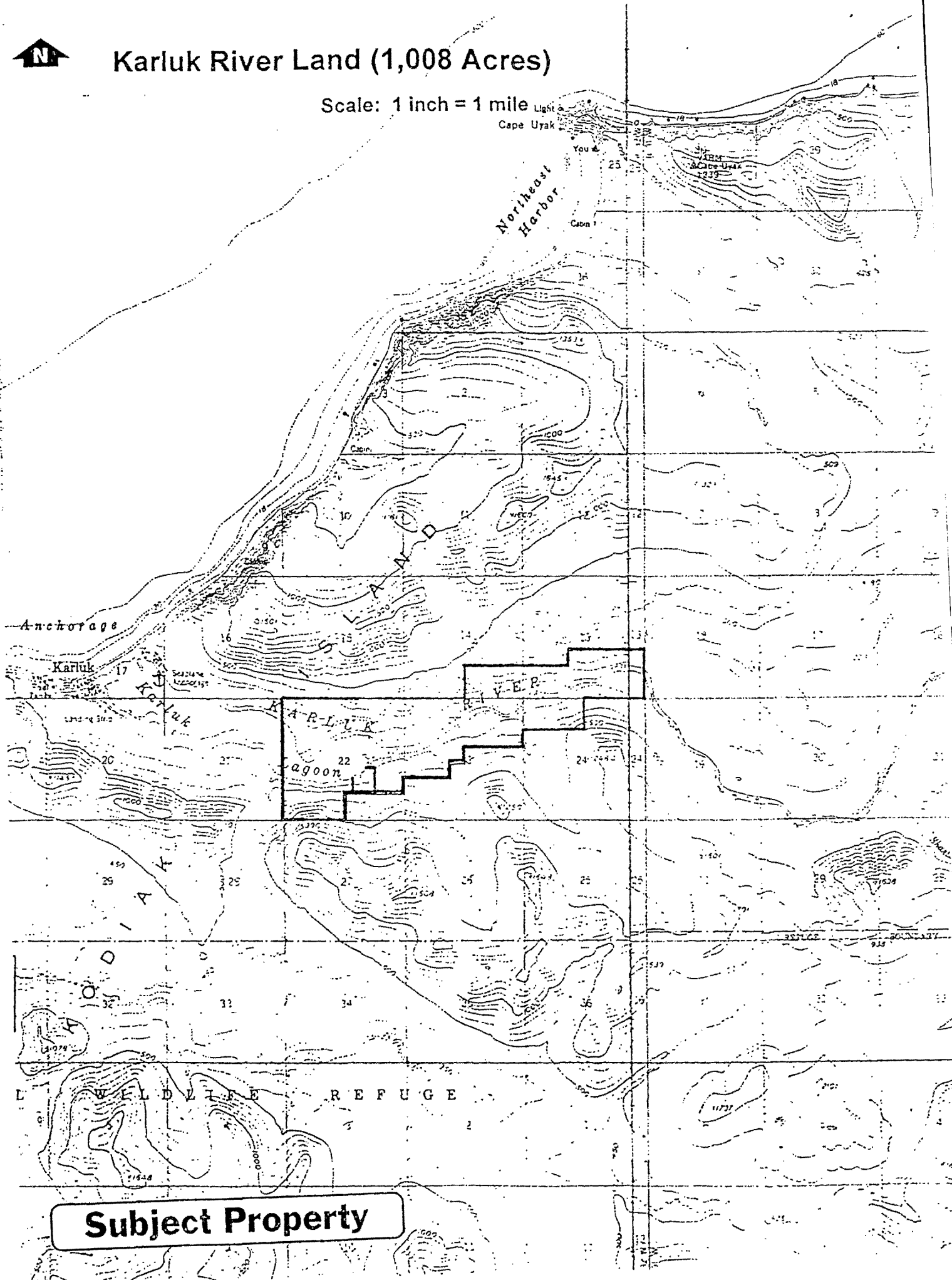


*Southeast view of the south bank of the Karluk River taken near the  
west-end of the property*



# Karluk River Land (1,008 Acres)

Scale: 1 inch = 1 mile



**Subject Property**

**Physical Description  
of Karluk River Land**

The map on the facing page illustrates shape, topographical elevation, extent of river frontage, and the proximity of Karluk (village). This land fronts both riverbanks and extends easterly from Karluk Lagoon upriver some three miles. Depth of the 1,008-acre land area from the riverbank varies from 600± to 1,500± feet. The Karluk River is navigable waters and excluded from the valuation. The principal physical characteristic affecting market behavior is the extent of Karluk River frontage that appeals to recreation users and sport fisherman. Significantly, we rate the entire 1,008 acres as strategic or high-amenity land.

We observed a fish weir and small cabin operated by State Fish and Game located upriver from the confluence of the lagoon and river. These improvements are not part of our analysis or valuation. We made an on-site field inspection at the "King Hole" along the north riverbank west of the weir.

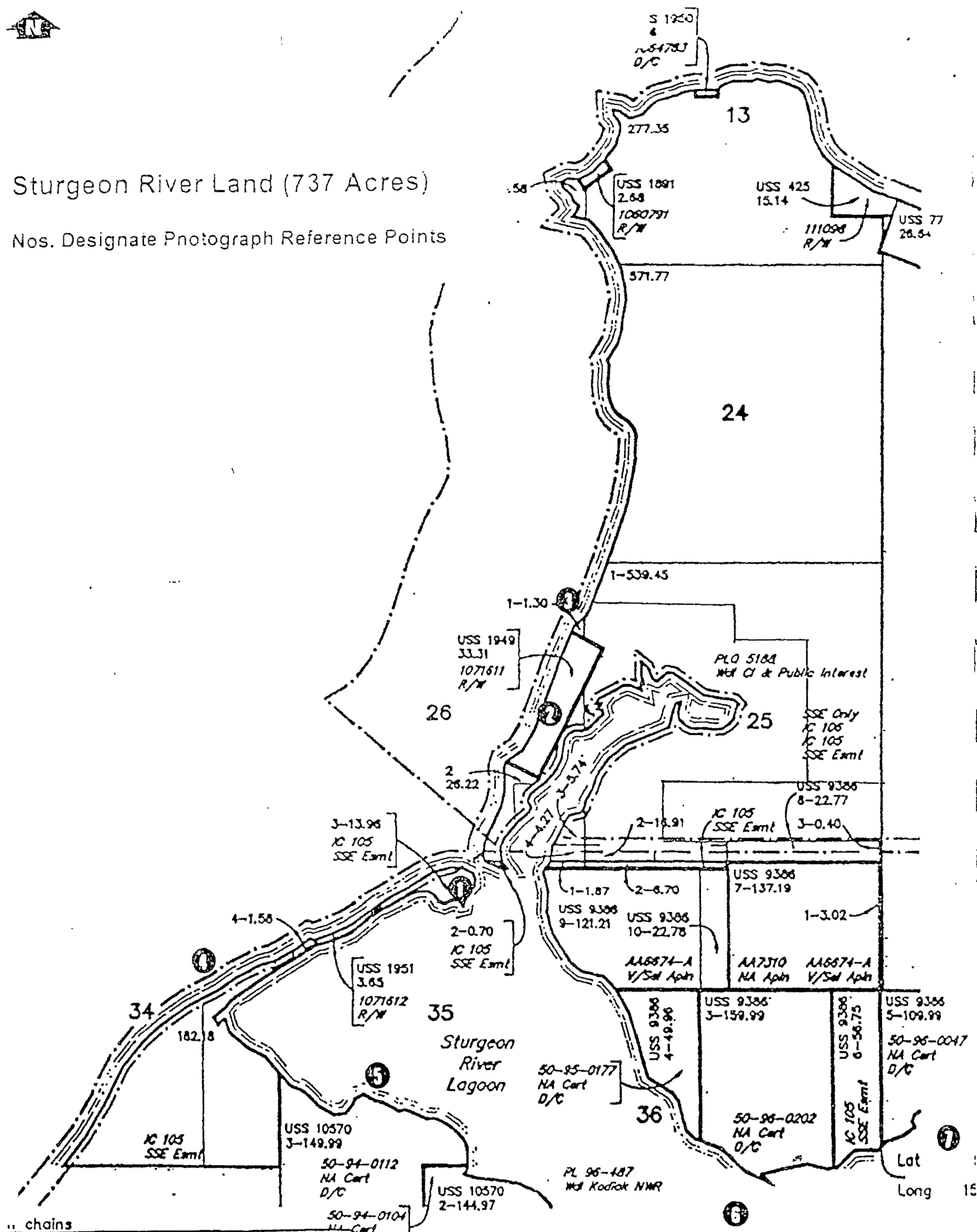
- ☐ **Kodiak National Wildlife Refuge:** Outside refuge boundaries
- ☐ **Land Area:** 1007.93 acres
- ☐ **Length of River Frontage:** Approximately three miles on both the north and south river banks (6± miles of river frontage)
- ☐ **Access:** Boat, floatplane, helicopter, ATV, or foot-trail from Karluk
- ☐ **Topography:** Ranges from modest to relatively steep slope; maximum elevation approximately 800 feet; majority of terrain useable and accessible from river; extended areas of river frontage rise steeply from the bank than change to an undulating bench
- ☐ **Vegetation:** Assorted grasses, low-lying shrubs, alders, and berries
- ☐ **Anadromous Streams:** Karluk River
- ☐ **Anchorage Potential:** Karluk Lagoon provides protection from weather and seas for marine craft
- ☐ **Utilities:** None
- ☐ **Easements and Restrictions:** 25-foot trail easement that allows public access as established under Section 17(b) of ANCSA parallels north bank of the Karluk River; one-acre campsite easement on the north bank of the Karluk River near the "King Hole"<sup>13</sup>

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<sup>13</sup> Campsite easement permits camping for up to 24 hours as a staging area, but it does not give users the right to fish from the easement area in the adjacent waters.

# Sturgeon River Land (737 Acres)

Nos. Designate Photograph Reference Points



**Subject Property**

**WARNING:**  
This plat is the Bureau's Record of Title, and should be used only as a graphic display of the township survey data. Records hereon do not reflect title changes which may have been affected by lateral movements of rivers or other bodies of water.



- ☐ Zoning: Conservation (C)
- ☐ Real Property Tax Assessments: Land within Kodiak Island Borough tax district, but tax exempt because of Native corporation ownership
- ☐ Environmental Assessment: No evidence of hazardous contaminants observed on land during property inspection; Level 1 HAZMAT assessment not provided to appraisers
- ☐ Improvements: Cabin observed at fish weir excluded from the valuation

#### Analysis of Karluk River Land

As stated, we rate the 1,008-acre Karluk River land as strategic land because of high demand from recreation users that enhances market appeal. The Karluk River provides access as well as an economic stimulus that increases the productivity of the land. Thus, the physical amenities of this land affect price behavior.

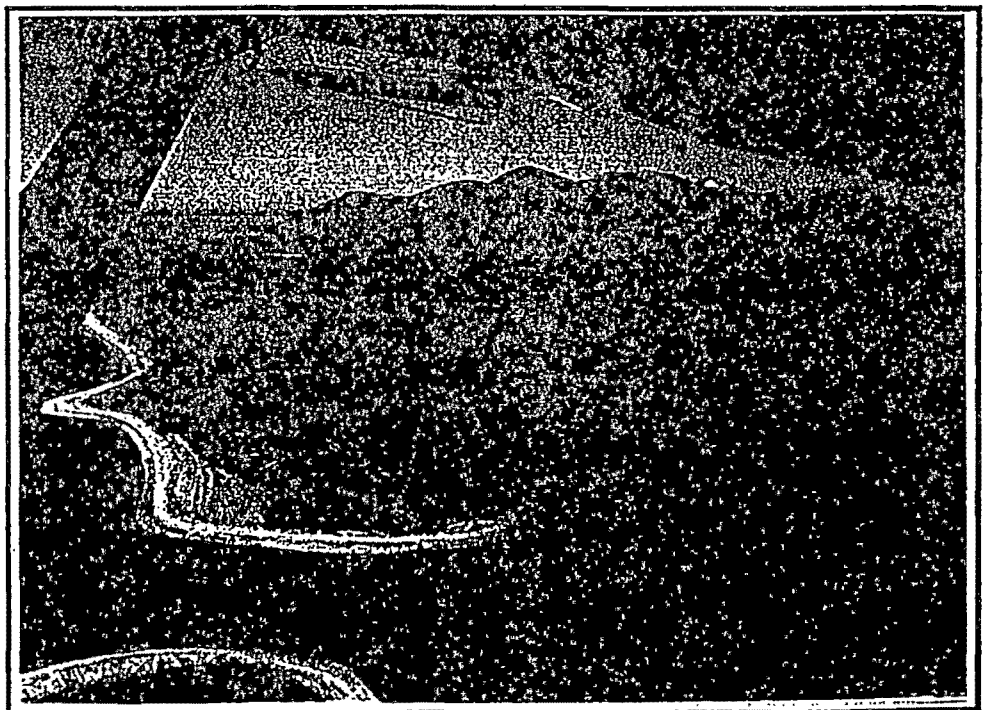
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#### Sturgeon River Photographs

The facing map provides a reference point of each photograph taken of the four non-contiguous parcels that comprise the Sturgeon River land.

*Date: June 5, 2000*

*Taken By: Dan Shantz*



*No. 1: North view of the north arm of the Sturgeon River*

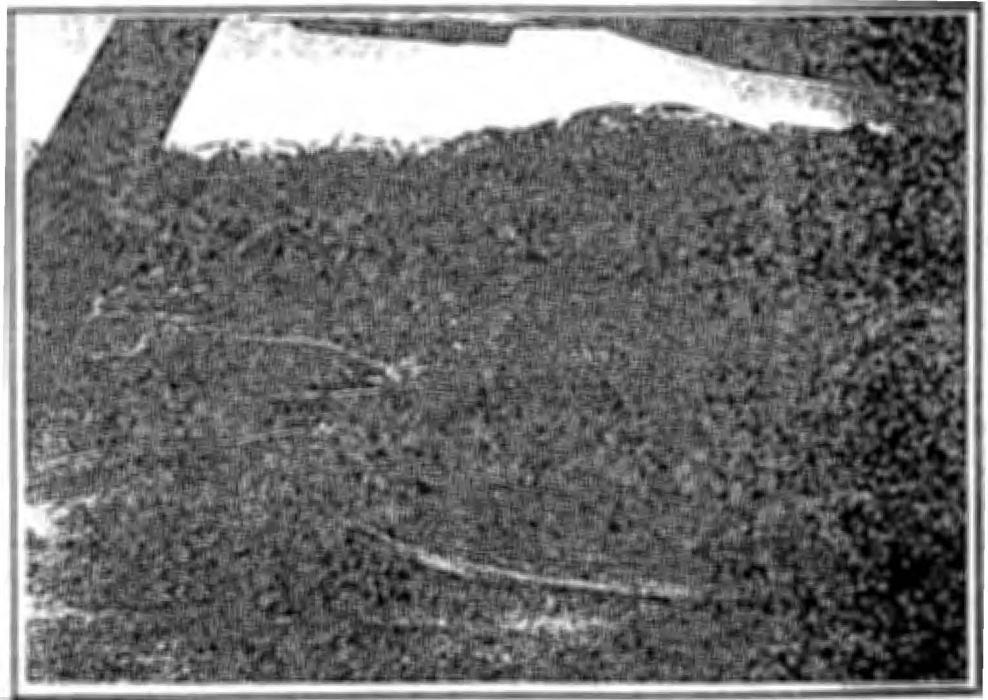
Sturgeon River  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz



*No. 2: East view of the north arm of the Sturgeon River*



*No. 3: Southeast view of the north arm of the Sturgeon River*

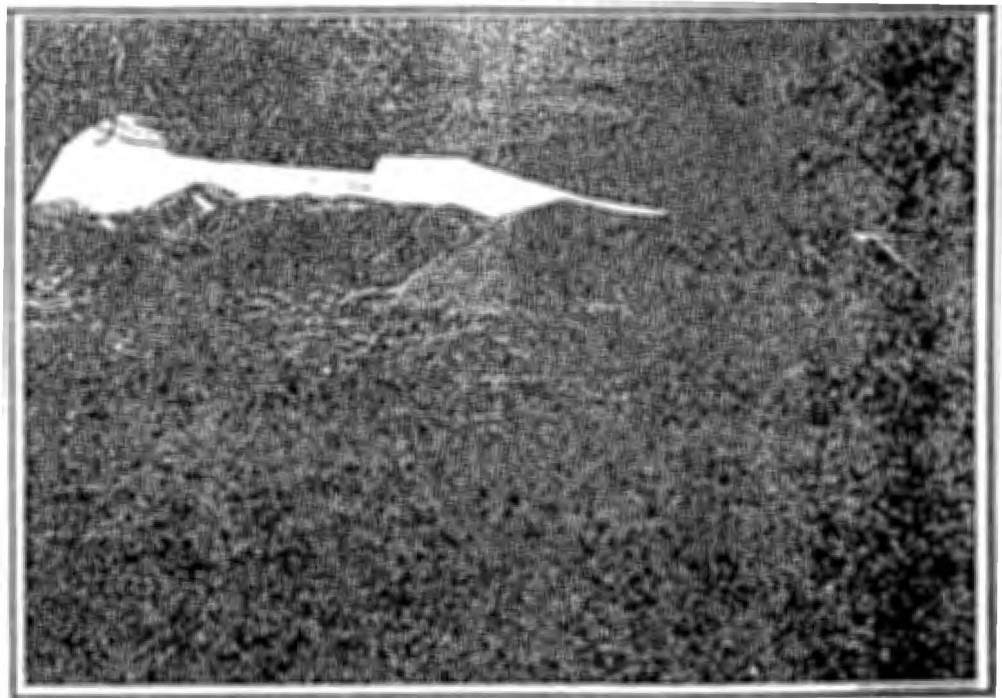
Sturgeon River  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz

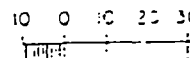


*No. 4: Southeast view of the south bank of the Sturgeon River*



*No. 5: West view of the south bank of the Sturgeon River*

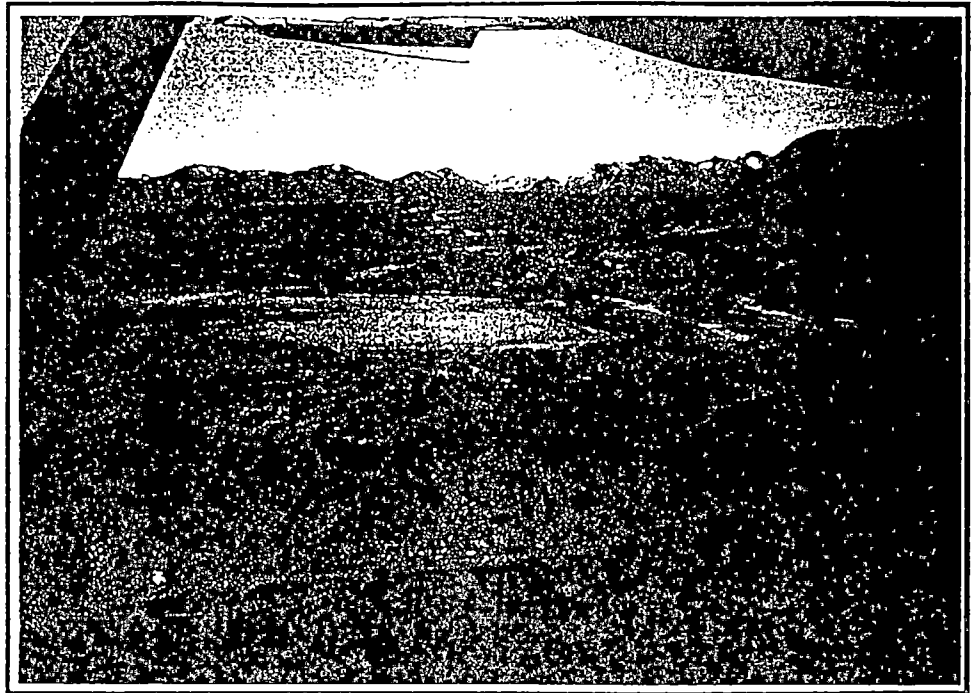
Nos. Designate Photograph Reference Points



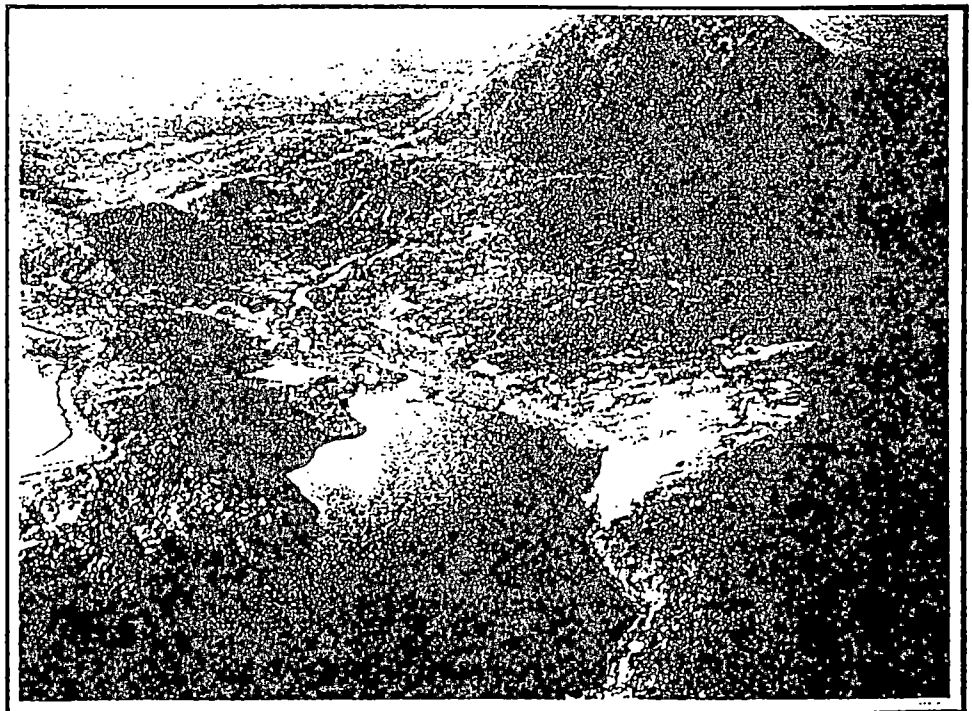
Sturgeon River  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz



*No. 6: Northeast view of the east bank of the Sturgeon River (note easterly river tributary at right side of photograph)*



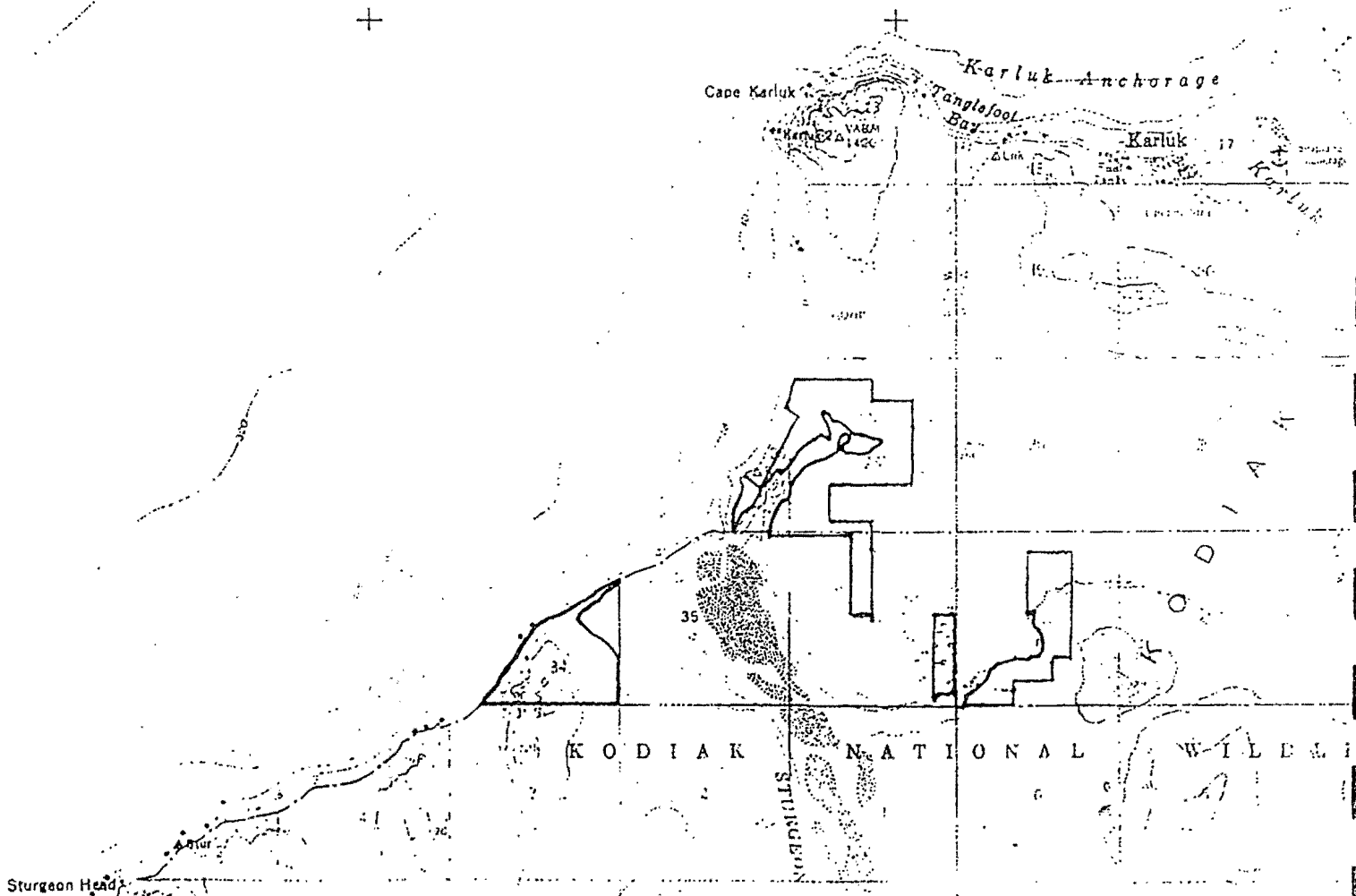
*No. 7: Northeast view along the easterly tributary of the Sturgeon River*



# Sturgeon River Land (737 Acres)

Scale: 1 inch = 1 mile

S  
H  
E  
L  
I  
K



**Subject Property**

**Physical Description  
of Sturgeon River  
Land**

We were unable to make an on-site field inspection of the Sturgeon River land because the tide level did not permit safe floatplane landing. The map on the facing page illustrates, shape, topographical elevation, extent of shoreline, and river frontage of the four non-contiguous Sturgeon River parcels. The mouth of the Sturgeon River is referred to as the Sturgeon Lagoon, but we use each name interchangeably in our descriptive analysis. Located some five miles northeast is Karluk.

The north parcel area contains 335 acres and fronts the north arm of the Sturgeon River that represents an intertidal lagoon. This land area has an irregular shape with several narrow areas that offer limited utility. At the mouth of the west bank of the Sturgeon River is a 182-acre parcel that has ocean and river frontage. Paralleling the south bank of the east tributary of the Sturgeon River is a 163-acre parcel. A 57-acre elongated parcel fronts the north bank of the east tributary.

- ☐ **Kodiak National Wildlife Refuge:** Majority of the 335-acre land area surrounding the north arm of the Sturgeon River outside of refuge boundaries; remainder of land area within the refuge
- ☐ **Land Area:** 736.61 acres
- ☐ **Length of Ocean Frontage:** Approximately 1.5 miles fronting Shelikof Strait; approximately 50 percent of the shoreline represents a steep embankment; remainder offers a direct entry profile with cobble intertidal sediment
- ☐ **Length of River Frontage:** Approximately 2.5 miles of Sturgeon River frontage (including north arm of river); approximately one mile of frontage on the east tributary of the Sturgeon River
- ☐ **Access:** Boat, floatplane, or helicopter; boat and floatplane access difficult at low tide intervals; shoreline access exposed to Shelikof Strait
- ☐ **Topography:** Majority of land area fronting the south bank of the river characterized by a steep slope (particularly land fronting Shelikof Strait), maximum elevation about 1,000 feet; remainder of land area characterized by undulating terrain ascending to 250 feet in elevation; pockets of low-lying areas with poorly drained soils also observed
- ☐ **Vegetation:** Assorted grasses, low-lying shrubs, alders, and berries
- ☐ **Anadromous Stream:** Sturgeon River
- ☐ **Anchorage Potential:** Shoreline exposed to Shelikof Strait; limitations exist because of tidal influences and variable weather and seas
- ☐ **Utilities:** None

W.C.M.C. EAST 4.05  
W.C.M.C. SOUTH 8.00  
14.64  
W.C.M.C. NORTH 2.40  
61.64

Sec. 19

Grant Lagoon Land (255 Acres)

GRANT  
LAGOON

Sec. 30

"A 60314"  
27°33.88' N.  
39°02.48' W.  
1027

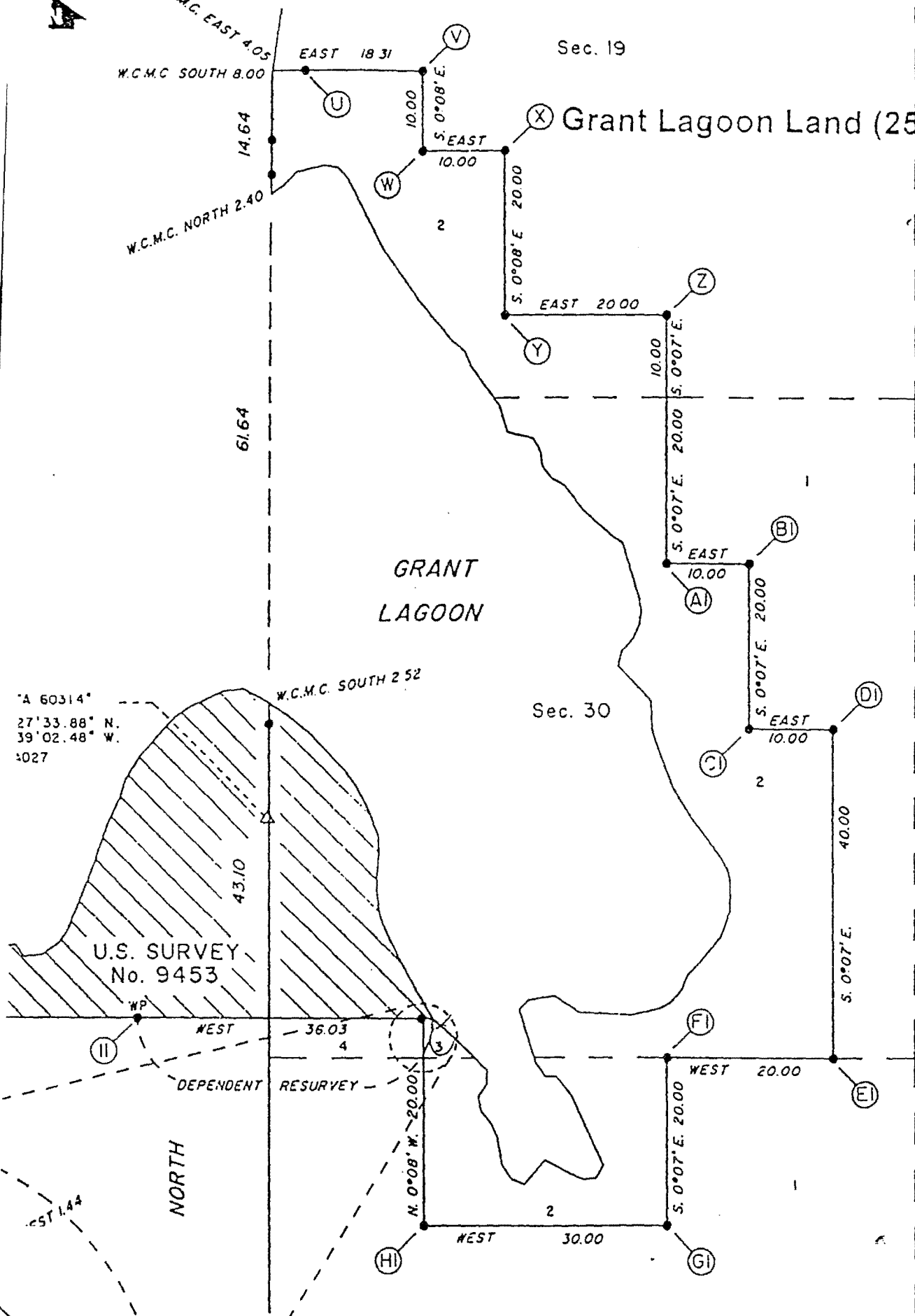
U.S. SURVEY  
No. 9453

DEPENDENT RESURVEY

NORTH

Subject Property

Sec. 31





- ☐ **Easements and Restrictions:** Section line easements; preliminary title report not provided appraisers
- ☐ **Zoning:** Conservation (C)
- ☐ **Real Property Tax Assessments:** Land within Kodiak Island Borough tax district, but tax exempt because of Native corporation ownership
- ☐ **Environmental Assessment:** No evidence of hazardous contaminants observed during property inspection; Level 1 HAZMAT assessment not provided to appraisers
- ☐ **Improvements:** None observed

### **Analysis of Sturgeon River Land**

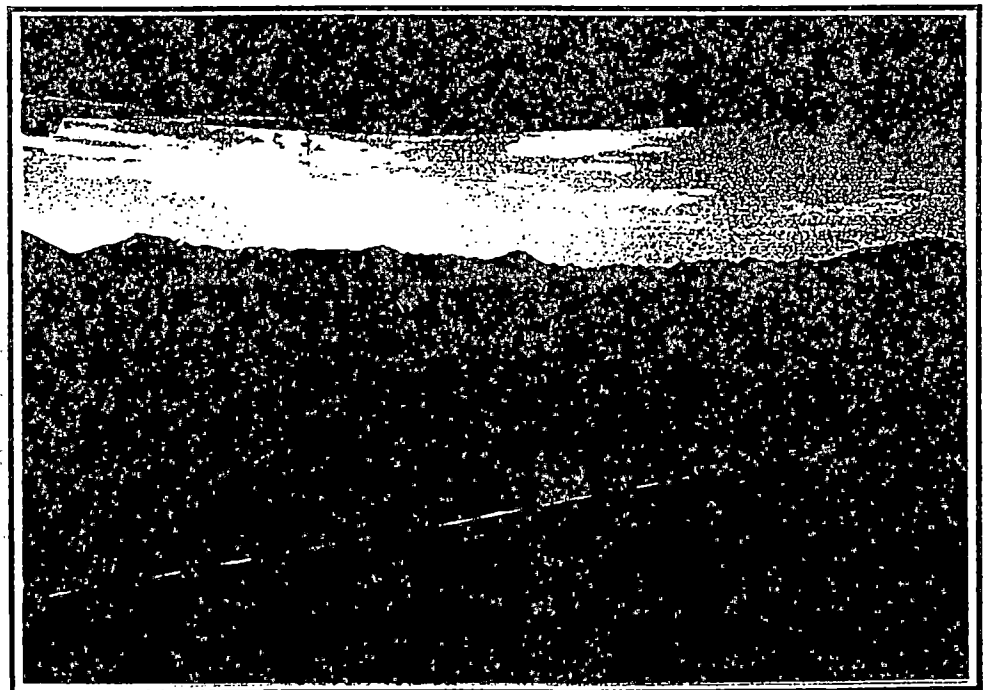
We observed steep slopes on the south bank and low-lying wetlands on the land fronting the north arm and the easterly tributary that have limited utility. In addition, an elongated configuration diminishes the utility of two of the Sturgeon River parcels. Moreover, tidal influences and exposure to Shelikof Strait restrict access. Based on these physical characteristics, we estimate the ratio of strategic land is 70± percent (see map in addenda depicting strategic land).

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### **Grant Lagoon Photographs**

*Date: June 5, 2000*

*Taken By: Dan Shantz*

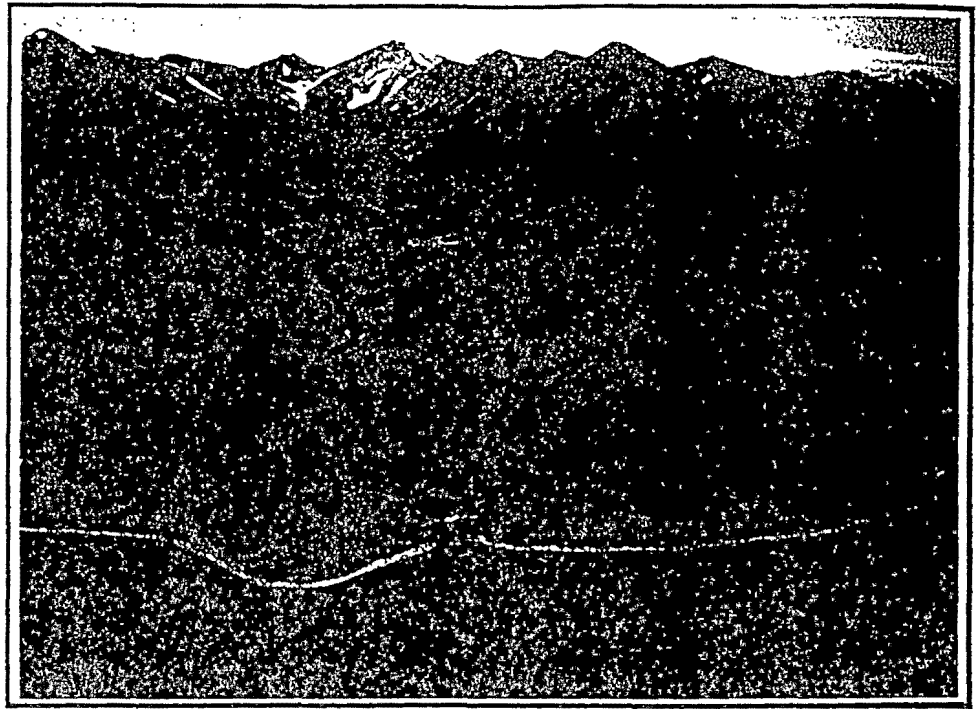


*Southeast view of Grant Lagoon*

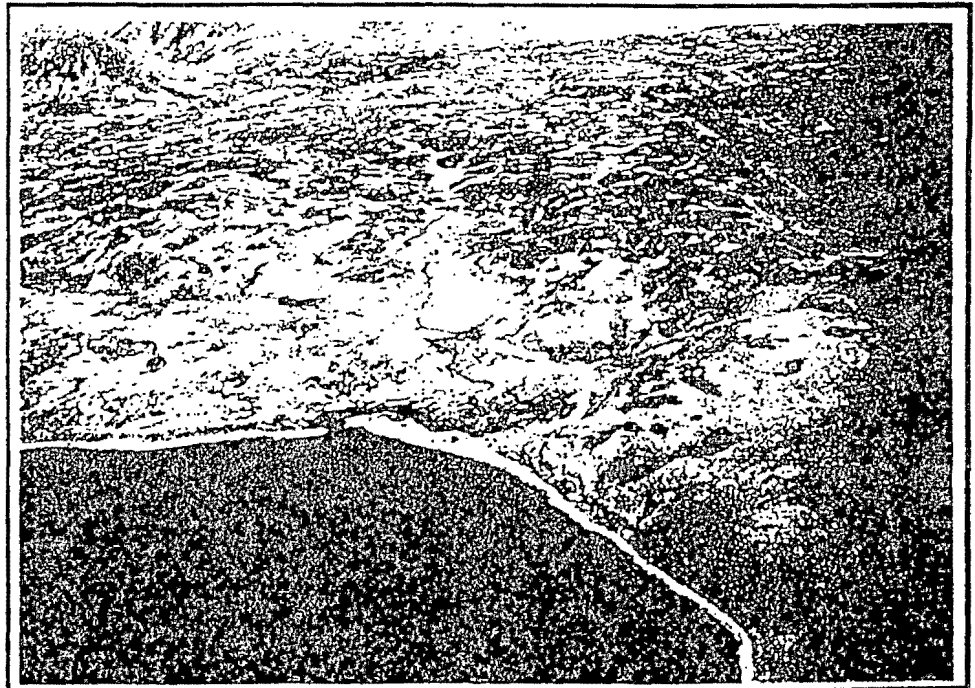
Grant Lagoon  
Photographs

*Date: June 5, 2000*

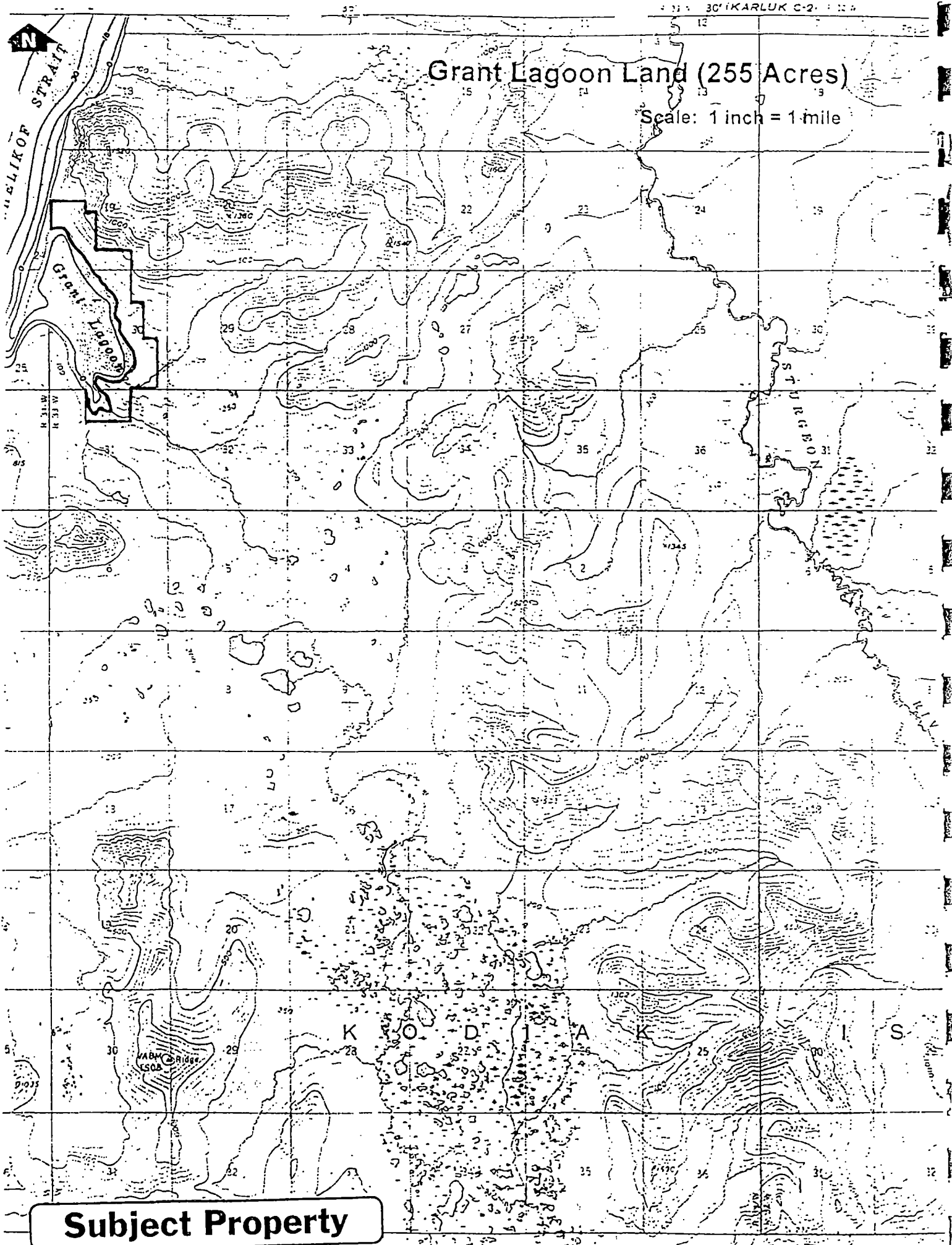
*Taken By: Dan Shantz*



*East view near the midpoint of the shoreline of Grant Lagoon*



*East view of the south end of Grant Lagoon*

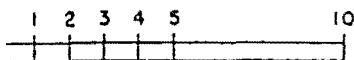
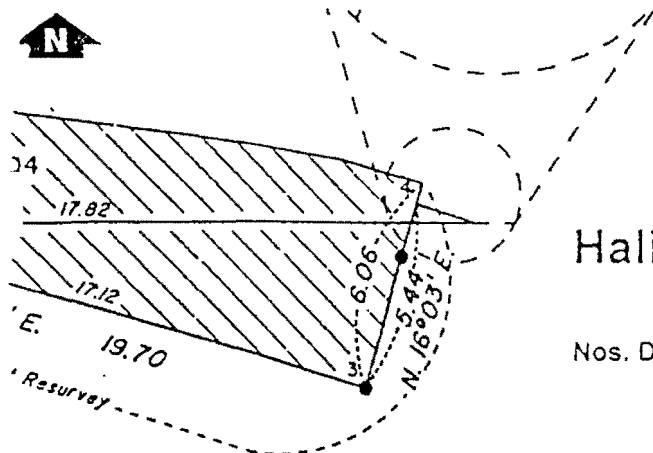


**Physical Description  
of Grant Lagoon  
Land**

The map on the facing page illustrates shape, topographical elevation, extent of lagoon frontage, and creek tributaries. Tidal accretion of the sand spit fronting Grant Lagoon has created a landlocked body of water. Thus, Grant Lagoon is absent of tidal change. The 255 acres of appraised land extends along the entire east shore of the lagoon and has an average depth of approximately 1,200 feet. An important physical characteristic of the Grant Lagoon land is exposure to Shelikof Strait. Karluk is located approximately 12 miles northeast.

We observed several "deadhead" logs within the lagoon that represent a safety concern affecting floatplane access. In addition, several guide caches covered with blue tarps were observed along the shore of the lagoon. Our on-site inspection started near the midpoint of the Grant Lagoon shoreline and continued to the south end of the land.

- ☐ **Kodiak National Wildlife Refuge:** Within refuge boundaries
- ☐ **Land Area:** 255.22 acres
- ☐ **Length of Ocean Frontage:** Approximately 2.8 miles fronting Grant Lagoon; direct entry shoreline profile
- ☐ **Access:** Boat, floatplane, or helicopter; boat access exposed to Shelikof Strait
- ☐ **Topography:** Ranges from generally level to a moderate slope with numerous undulations and several drainage swales; maximum elevation approximately 600 feet; pockets of poorly drained soils observed during on-site inspection; low-lying wetland areas observed near the south end of Grant Lagoon
- ☐ **Vegetation:** Assorted grasses, low-lying shrubs, alders, and berries
- ☐ **Anadromous Streams:** None; freshwater water creeks observed
- ☐ **Anchorage Potential:** Exposure to Shelikof Strait restricts anchorage opportunities during certain weather and seas; Grant Lagoon not accessible by boat
- ☐ **Utilities:** None
- ☐ **Easements and Restrictions:** Section line easements; preliminary title report not provided appraisers
- ☐ **Zoning:** Conservation (C)
- ☐ **Real Property Tax Assessments:** Land within Kodiak Island Borough tax district, but tax exempt because of Native corporation ownership



Chains

DETAIL A

Sec. 10

73.05

Sec. 11

421.08

## Halibut Bay Land (191 Acres)

Nos. Designate Photograph Reference Points

Sec. 14

211.10

U.S.S.  
9376

Sec. 23

275.66

Sec. 29

8.50

Sec. 27

83.88

Sec. 26

636.09

W.C.M.C. EAST 0.39  
WEST 11.27  
W.C.M.C. N. 48° 08' W. 2.40

Sec. 32

278.57

Sec. 33

103.46

Sec. 34

76.79

Sec. 35

629.98

U.S.S.  
6723

U.S.S.  
9377

C.M.C. EAST 3.00

70.04

87.43

WEST

SEE  
DETAIL A

SEE  
DETAIL B

60.00

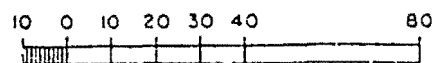
70.36

EIGHTH

STANDARD

PARALLEL

50



Chains

**Subject Property**

Area Surveyed: 7,374.52 Acres

- ☐ **Environmental Assessment:** No evidence of hazardous contaminants observed during property inspection; Level 1 HAZMAT assessment not provided to appraisers
- ☐ **Improvements:** Several guide caches observed during property inspection, but no value contribution to the land

#### Analysis of Grant Lagoon Land

The Grant Lagoon land has a frontage-to-depth ratio that enhances utility. Because of tidal accretion of the sand spit fronting Shelikof Strait, Grant Lagoon is landlocked. This physical feature eliminates tidal change and enhances floatplane access. A majority of the 255-acre land area is physically suitable for recreation use. We estimate the ratio of strategic land is 85± percent (see map in addenda depicting strategic land).

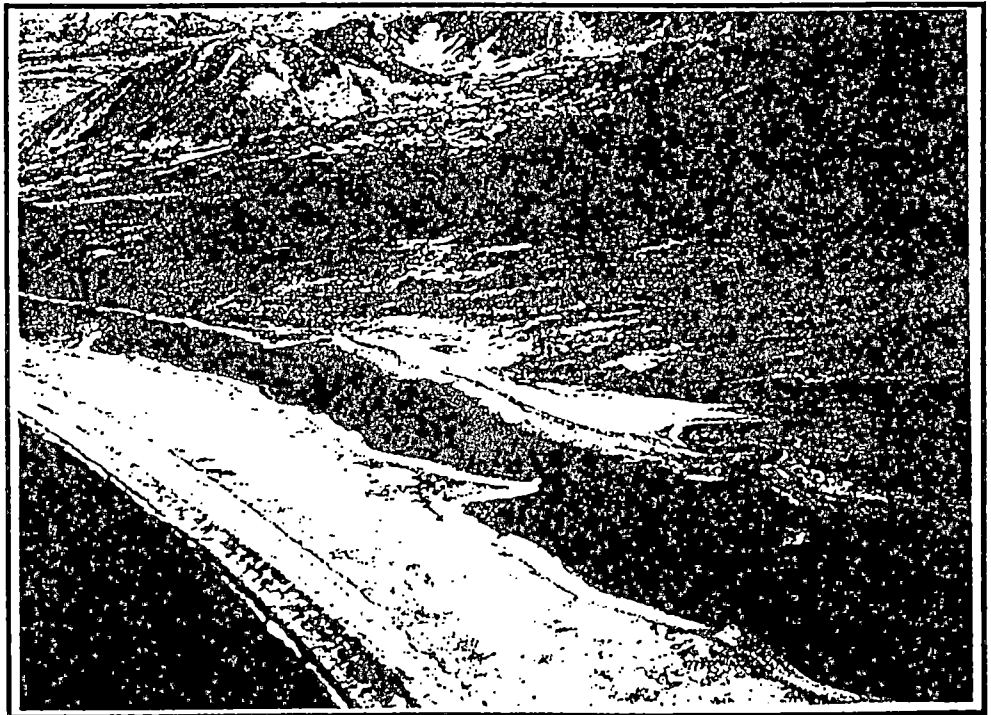
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#### Halibut Bay Photographs

The facing map provides a reference point of each photograph taken of the two parcels that comprise the Halibut Bay land.

*Date: June 5, 2000*

*Taken By: Dan Shantz*

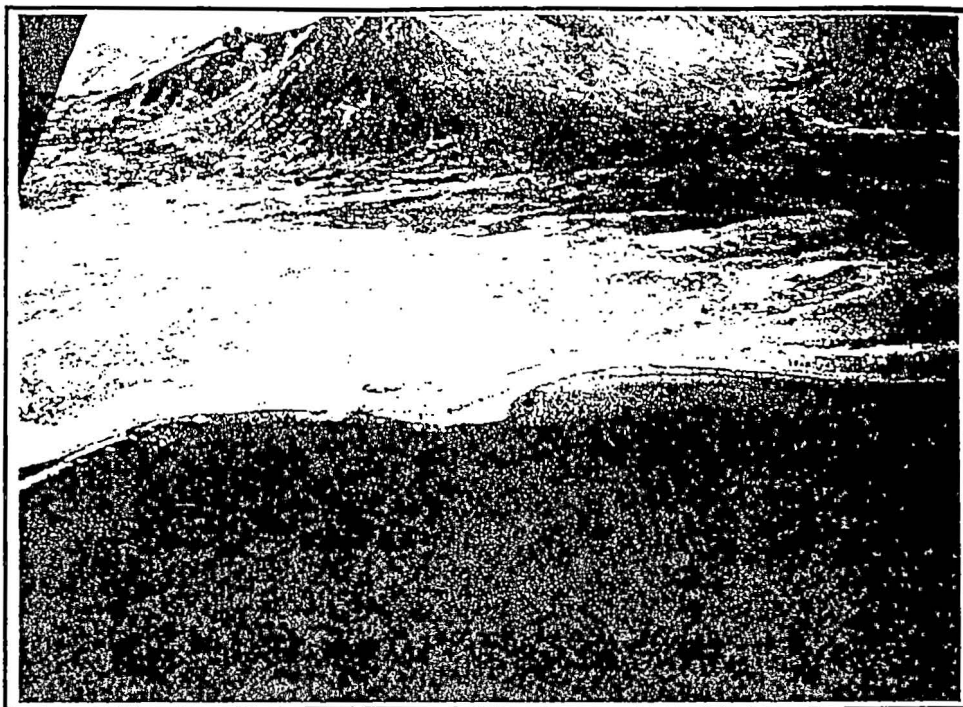


*No. 1: Northeast view of the north arm of the inner lagoon*

Halibut Bay  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz



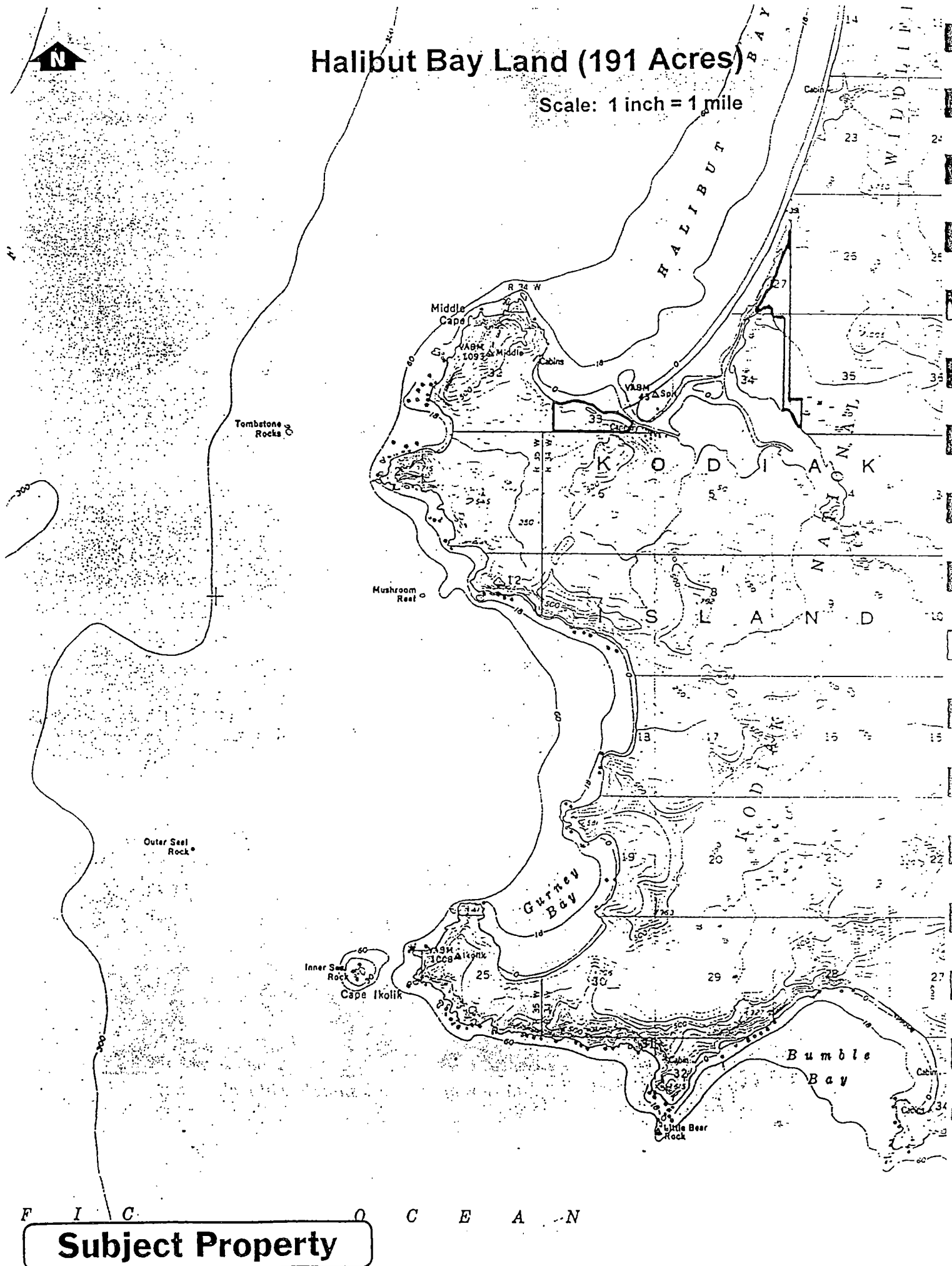
*No. 2: Northeast view of the land fronting the north shore of the inner lagoon*



*No. 3: South view of the south shoreline of Halibut Bay*

# Halibut Bay Land (191 Acres)

Scale: 1 inch = 1 mile



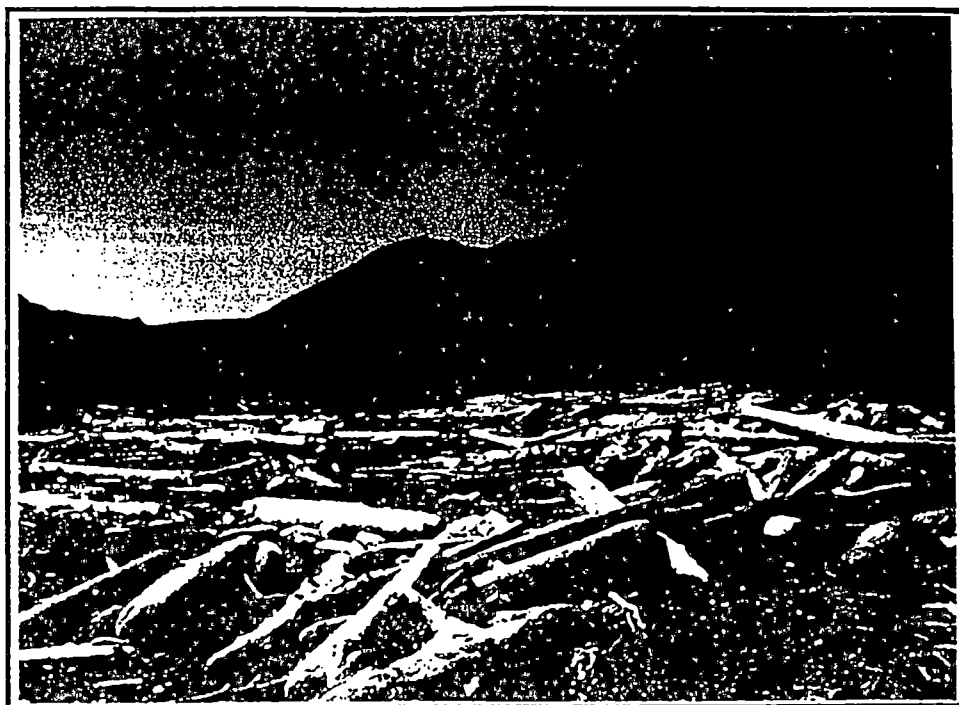
Subject Property



Halibut Bay  
Photographs

Date: June 5, 2000

Taken By: Dan Shantz



No. 4: West view along the south shoreline of Halibut Bay

Physical Description  
of Halibut Bay Land

The map on the facing page illustrates shape, topographical elevation, extent of shoreline, and inner lagoon frontage. The 191-acre land area consists of two parcels, one fronting the south shoreline of Halibut Bay and the other with frontage on the inner lagoon. The inner lagoon land contains 104 acres and has an elongated shape that diminishes utility. The 87 acres fronting Halibut Bay is located at the entrance to the inner lagoon due west of a former cannery site. This location allows floatplane access within the protected waters of the inner lagoon as well as from the bay. Halibut Bay is located about 18 miles southwest of Karluk.

We performed an on-site inspection on the land fronting Halibut Bay. This land has a direct entry shoreline profile with cobble intertidal sediment. Shallow offshore water in the inner lagoon prevented an on-site inspection of the 104 acres fronting the inner lagoon. However, we observed low-lying wetland with poorly drained soils during our aerial overflight:

- ☐ Kodiak National Wildlife Refuge: Within refuge boundaries
- ☐ Land Area: 191.12 acres

- ☐ **Length of Ocean Frontage:** Approximately 1.9 miles fronting Halibut Bay and the inner lagoon; direct entry shoreline profile
- ☐ **Access:** Boat, floatplane, or helicopter; shallow offshore water in inner lagoon during low tide levels restricts access; exposure to Shelikof Strait affects access during certain weather and seas
- ☐ **Topography:** Majority generally level to a modest slope; maximum elevation approximately 400 feet; level near-shore terrain that rises abruptly to an undulating bench characterizes the land fronting Halibut Bay; low-lying areas with poorly drained soils observed on inner lagoon land
- ☐ **Vegetation:** Assorted grasses, low-lying shrubs, alders, and berries
- ☐ **Anadromous Streams:** Unnamed stream flows into the inner lagoon
- ☐ **Anchorage Potential:** Exposure to Shelikof Strait restricts anchorage opportunities during certain weather and seas; inner lagoon provides protection, but tidal change affects anchorage
- ☐ **Utilities:** None
- ☐ **Easements and Restrictions:** Section line easements; preliminary title report not provided appraisers
- ☐ **Zoning:** Conservation (C)
- ☐ **Real Property Tax Assessments:** Land within Kodiak Island Borough tax district, but tax exempt because of Native corporation ownership
- ☐ **Environmental Assessment:** No evidence of hazardous contaminants observed during property inspection; Level 1 HAZMAT assessment not provided to appraisers
- ☐ **Improvements:** None observed

**Analysis of Halibut Bay Land**

The narrow 25± acres that link the upper lagoon to the inner lagoon have limited utility from a recreation perspective. In addition, tidal influences that restrict shoreline access diminish utility. Moreover, low-lying wetland areas limit recreation potential. Based on these physical features, we estimate the ratio of strategic land fronting the inner lagoon is 70± percent. In contrast, the physical character of the land fronting Halibut Bay enhances utility and recreation use. Despite exposure to Shelikof Strait weather and seas, we rate the entire 87 acres as strategic land (see map in addenda depicting strategic land).

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**Kodiak Island  
Borough Zoning**

The appraised land is within the Conservation (C) zoning district that pertains to most remote Kodiak land within the KIB. The purpose of this district is to maintain open space areas while providing for single-family residential and limited commercial use.<sup>14</sup> Land area requirements are a minimum of five acres and the maximum lot coverage may not exceed five percent. Permitted uses of the Conservation zoning district are as follows:

- ☐ Agricultural activities, except commercial livestock grazing;
- ☐ Commercial fishing activities;
- ☐ Commercial guiding and/or outfitting activities that contain provisions for no more than six clients;
- ☐ Parks;
- ☐ Recreation activities;
- ☐ Single-family dwellings and recreation cabins; and
- ☐ Timber harvesting activities

Conditional uses, which require a public hearing process, include lodges serving more than six clients, logging camps, mining, and seafood processing. Enclosed in the addenda are complete details of the Conservation district.

**Kodiak National  
Wildlife Refuge Land  
Use Regulations**

As stated, the south portion of the Sturgeon River land and all of the land located in Grant Lagoon and Halibut Bay are within KNRW boundaries and subject to Section 22(g) of ANCSA. Section 22(g) states: "If a patent is issued to any Village Corporation for land in the National Wildlife Refuge System, the patent shall reserve to the United States the right of first refusal if the is ever sold by the Village Corporation. Notwithstanding any other provision of this Act, every patent issued by the Secretary pursuant to the Act – which covers land lying within the boundaries of a National Wildlife Refuge on the date of enactment of this Act shall contain a provision that such lands remain subject to the laws and regulations governing use and development of such Refuge".<sup>15</sup>

Based on Section 22(g), the appraised land is subject to the laws and regulations governing use and development within the KNWR. We

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<sup>14</sup> Kodiak Island Borough Title 17 Zoning Code 1/94, p. 17-28.

<sup>15</sup> *Alaska Native Claims Settlement Act of 1971*, Public Law 92-203, December 18, 1971, p. 29.

Based on Section 22(g), the appraised land is subject to the laws and regulations governing use and development within the KNWR. We reviewed both the *Public Use Management Plan* and the *Comprehensive Conservation Plan* pertaining to the KNWR.<sup>16</sup> The primary objective of these plans is to protect resources and habitat by ensuring compatible land use. Subsistence users, recreation users, and commercial operators are expected to minimize conflict and cooperate with refuge management. The comprehensive plan has a chapter titled Management Alternatives that summarizes permitted activities and uses of the land, including sections on economic uses.<sup>17</sup> In addition, this chapter addresses management of Section 22(g) land.<sup>18</sup>

We rely on these land use management plans in analyzing those subject lands located within refuge boundaries. KNWR management may not have the enforcement power of a zoning ordinance, but their approval of a proposed land use is imperative to economic feasibility.

#### **Other Land Use Regulations**

Development of the appraised parcels requires review and recommendations by the Kodiak Island Coastal Management Program. Again, this plan does not grant enforcement power, but they establish guidelines for acceptable land use. Furthermore, the State Department of Fish and Game has regulations that may affect potential land use. In addition, regulations pertaining to development of on-site water and wastewater systems may affect land use.

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<sup>16</sup> Copies of each document retained on file.

<sup>17</sup> *Comprehensive Conservation Plan/Environmental Impact Statement/Wilderness Review*, Kodiak National Wildlife Refuge, 1987, p. 153-171.

<sup>18</sup> *Ibid*, p. 173.

## **Chapter 4: Summary of Remote Land Market**

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### **Overview**

Few arm's length land sales involving private parties that contain over 160 acres have occurred in the past 20 years, particularly on Kodiak Island. Because economic demand for remote land is scarce, we collect and analyze sale data statewide. In addition, we review land listings, offers, leases, exchanges, as well as acquisitions by public agencies and special interest groups. These latter land transactions are useful in analyzing supply, demand, anticipated use, and marketing time. The analysis that follows is intrinsic to the highest and best use analysis in Chapter 5.

### **Discussion of Ownership, Supply and Demand**

Federal, State, Borough, and Native corporations are the four principal ownership groups that comprise the supply of remote Alaska land. Excluding Native corporations, private ownership of remote land is less than one percent of the total. Because of this ownership pattern, most transactions involve public agencies or Native corporations. Often buyer and seller motivations differ from the economic rational that most private parties exercise. Although there is an abundant supply of remote land, the principal ownership groups rarely market their holdings for sale. We attribute this to a scarcity of demand as well as land management of the ownership groups.

Demand for remote land is comprised of public agencies, special interest groups, and private parties. The economic incentive of many private party acquisitions is natural resource potential such as timber or minerals. Recreation potential and speculation are the other principle economic "drivers" for remote land. Most public agency acquisitions are inholdings of National parks, preserves, refuges, or forests. Their purchase motivations are to consolidate management, prevent conflicting use, and preserve wildlife habitation. Conservation organizations are an emerging market participant motivated by habitat preservation. Despite non-economic purchase rational, public agency and special interest group acquisitions influence market behavior and price negotiations.

### **Discussion of EVOSTC Land Acquisitions**

Formation of the EVOSTC to oversee a \$900 million civil settlement negotiated by Exxon Corporation and the State and Federal governments created a new participant in the remote land market. Because settlement money is for restoration and acquisition of spill-affected lands, the EVOSTC has been an active participant of small

and large parcel acquisitions. Since 1993, they acquired approximately 700,000 acres of land located in Prince William Sound, Kenai Peninsula, Kachemak Bay, and Kodiak Archipelago. The purpose of the EVOSTC acquisitions is to protect valuable habitat and to ensure the long-term needs of area residents. The EVOSTC evaluates and ranks land within the spill-affected area for acquisition by the Comprehensive Habitat Protection Process.

Land acquired by the EVOSTC has reduced private ownership as well as imposed use restrictions on significant portions of Native corporation land. Moreover, we believe a mandated agenda influenced buyer motivations. Specifically, the buyer identifies parcels that qualify for acquisition by evaluating habitat protection and cultural benefits rather than economic feasibility. The absence of a competitive market setting contradicts the fundamental economic premise of supply and demand.

Significantly, we do not rely on the EVOSTC acquisitions in the comparative analysis of the appraised land. However, we consider the acquisitions an important market influence that affects the price expectations of sellers. Purchases by the EVOSTC ranged from \$400 to \$600 per acre for spill-affected land that qualified for restoration and acquisition regardless of property rights conveyed.<sup>19</sup> We enclose a summary table of several large parcel acquisitions by the EVOSTC in the addenda.

#### Discussion of Land Acquisitions by Government Agencies and Special Interest Groups

As stated, we do not rely on government acquisitions, leases, or exchanges in performing our comparative analysis of the appraised land, but we acknowledge that they are part of the supply and demand dynamics that influence the remote land market. Similar analysis applies to land acquisitions by special interest groups. An example of government acquisitions is FWS purchases of 10 Native allotments located in the Sturgeon River, Grant Lagoon, and Halibut Bay. We enclose in the addenda a summary table of these acquisitions. Furthermore, we provide a 20-year summary of a majority of remote Alaska land acquired, leased, or exchanged by government agencies and special interest groups in the addenda.

<sup>19</sup> Excludes acquisitions on Afognak and Shuyak Islands affected by timber.

**Conclusion of Market  
Summary**

The data presented in this chapter emphasizes the scarcity of remote land acquisitions by private parties as well as the participation of government agencies and special interest groups. Demand for remote land by private parties is also scarce because of limitations regarding potential productivity. We use this information to assist the highest and best use analysis that follows.

## Chapter 5: Highest and Best Use Analysis

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### Overview

We determined that the highest and best use of the subject land is recreation. However, our analysis indicates the productivity of the Karluk River land is greater than the land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay. This is an important distinction because we perform independent comparative analysis to differentiate productivity and the market effect on value.

Highest and best use is a market-driven concept rather than a subjective conclusion based on the experience of the appraiser or a property owner's needs. Economic incentive is the motivation that has a market effect on the productivity of the land. Highest and best use is defined as follows.

*The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.<sup>20</sup>*

Determining the most profitable use of remote land requires analyzing all feasible alternatives. The criteria for testing potential use are legally permissible, physically possible, financially feasible, and maximally productive. The following highest and best use analysis is the foundation of our appraisal.

### Discussion of Potential Land Use

An understanding of economic theory and its effect on market behavior is crucial in determining the highest and best of a particular property. However, when analyzing remote Kodiak land, few economic alternatives exist from a development perspective. Most land in the Kodiak market area is vacant and development pressure is minimal. The primary use of developed land is commercial or private recreation.

Most remote Kodiak land contains strategic areas that offer greater productivity as well as areas unsuitable for development. For example, level near-shore terrain has greater development potential than steep inland slopes. Thus, the ratio of strategic or high-amenity land affects

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<sup>20</sup> *The Appraisal of Real Estate*, by the Appraisal Institute, Eleventh Edition, 1996, p. 297.



potential land use. Although ratio of strategic area is an important economic benefit, the driving force for acquiring remote land is often speculation. Listed below are potential land uses of the appraised land.

- ☐ Staging for commercial fishing;
- ☐ Hunting/fishing lodge;
- ☐ Tourism/recreation lodge;
- ☐ Homesite;
- ☐ Recreation cabin;
- ☐ Private retreat;
- ☐ Recreation subdivision;
- ☐ Speculation;
- ☐ Passive recreation (subsistence, sightseeing, hiking, camping, sport hunting/fishing, wildlife habitation, etc.)

**Explanation of  
Highest and Best Use  
Classifications**

The potential uses listed above represent the components of market demand for remote land. We recognize that prices paid for some of these potential uses are greater than others because the productivity of the land differs. Rather than assert that a specific use is the most productive, we delineate these potential uses into three highest and best use classifications summarized as follows:

***Commercial or Private Recreation:*** This classification represents remote land with desirable physical features such as a strategic location on a stream or protected shoreline. Furthermore, upland terrain must be suitable for development. Our analysis indicates a majority of commercial or private recreation land contains 160 acres or less, although we analyze several sales that exceed this threshold. Potential uses of this land classification are staging for commercial fishing, hunting/fishing lodge, tourism lodge, guide camp, recreation cabin, homesite, or private retreat.

***Recreation with Limited Development Potential:*** This classification represents remote land that has minimal economic pressure to develop. Terrain extremes such as steep mountain slopes, exposed shorelines, difficult access, and low-lying wetlands characterize the land. We determined from our analysis that recreation land with limited development potential often consists of large non-contiguous parcels that have continuity of ownership. Passive recreation is the principal land use. However, strategic areas are present that represent possible locations for commercial or private recreation use. These strategic areas have a greater value contribution to the whole property value.

Therefore, the extent of strategic areas affects productivity. Speculation is also an important economic factor that affects this land use classification.

***Restricted Recreation:*** This classification represents remote land imposed with deed reservations, covenant, or easements that restrict development potential. The legal encumbrance may change the highest and best use and cause a reduction in the economic productivity of the land. Because of imposed restrictions, recreation development may be delayed or certain uses may be subject to annual review. Passive recreation is often the only permissible land use of this classification.

The analysis that follows concludes with our opinion of the highest and best use of the appraised land.

#### **Highest and Best Use Analysis**

***Legally Permissible:*** The primary legal constraints affecting the subject are zoning by the KIB and KNWR regulations that govern land use. In addition, State Fish and Game impose restrictions and manage fish and wildlife resources that may influence development of a particular land use. The appraised land is in the Conservation zoning district, which encourages development that is sensitive to the surrounding environment. Permitted uses include commercial fishing, commercial lodge, recreation cabin, single-family dwelling, and timber harvesting activity. Conditional uses that require a public hearing process are lodges serving more than six clients, logging camps, mining, and seafood processing.

KNWR regulations affect only the subject land fronting the south portion of the Sturgeon River, Grant Lagoon, and Halibut Bay. The KNWR *Comprehensive Conservation Plan* identifies land use activities permitted within refuge boundaries, including economic uses. Significantly, any type of development that represents an economic use requires a site-specific environmental assessment and compatibility determination. However, this requirement does not differ significantly from zoning and coastal management regulations.

Prohibited land use activities within the KNWR include staging areas for commercial fishing and seafood processing.<sup>21</sup> Thus, regulations governing land use restrict commercial fishing and seafood processing as legal use of the appraised land located within KNWR boundaries.

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<sup>21</sup> Staging area for commercial fishing permitted if established before 1985.

In contrast, zoning regulations have a minimal effect on potential land use because permitted uses of the Conservation zone are similar to past and anticipated use of remote Kodiak land.

*Physically Possible:* We discussed and analyzed physical features that enhance as well as detract from the appraised land in Chapter 3. The land fronting the Sturgeon River and the inner lagoon of Halibut Bay have access constraints during low tide levels. In addition, we observed low-lying wetlands with poorly drained soils and areas with steep slopes that impair recreation utility. However, we determined that a majority of the subject land is physically suitable for recreation use.

Significantly, the 1,008 acres of land fronting the riverbanks of the Karluk River is superior in location and physical character when compared to the remaining 1,183 acres of subject land. These features enhance recreation appeal and utility, which has a direct impact on economic feasibility.

*Financially Feasible:* Demand for remote Kodiak land declined in the past decade, but available supply also diminished. Commercial and private recreation is the principal component of demand and most of these users acquire land that has a strategic river or ocean location. In particular, the Karluk River land represent a strategic location supported by fishing and hunting resources desired by recreation users. Use of the Karluk River for float trips, sport fishing, hunting, bear-viewing, and other commercial recreation activities has increased over the past 15-year interval, although the growth rate has stabilized in recent years.<sup>22</sup> Furthermore, long-term demand by these users appears unfulfilled. Therefore, we determined commercial and/or private recreation is the financial feasible land use alternative of the Karluk River land. Moreover, we consider the entire 1,008 acres of land area suitable for this use.

The remaining 1,183 acres of the subject land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay also represent strategic locations for sport fishing and hunting. In fact, their non-contiguous character enhances the market appeal for this type of use because it permits multiple options to an operator. However, access and other physical constraints affect market behavior. We determined that commercial or private recreation use of this 1,183 acres is financially feasible, but the productivity differs from the Karluk River land. We

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<sup>22</sup> John Merrick, Land Manager, Koniag, Inc.

attribute this difference to access, ratio of strategic land, and demand by recreation users.

*Maximally Productive:* Commercial and/or private recreation is a financially feasible land use alternative. Because of the location and physical attributes of the Karluk River land, we anticipate greater demand for this land. Moreover, the supply of land with similar features is very limited. Thus, these economic factors will affect price behavior from a market prospective. Therefore, marketing the 1,008-acre Karluk River independent of the remaining acreage maximizes the productivity of the appraised land.

Furthermore, marketing the non-contiguous Sturgeon River land as a single economic unit enhances productivity because the most probable buyer desires multiple locations within the same geographic area.

**Conclusion of Highest  
and Best Use Analysis**

We determined that commercial and/or private recreation is the highest and best use of the subject land. Moreover, marketing the Karluk River land independent of the remaining acreage maximizes productivity. This economic strategy will not increase exposure time nor will it increase marketing or holding costs. In our opinion, it makes market sense to analyze the subject property as two independent economic units. This analysis reflects the behavior of knowledge participants and it provides a greater return to the land. Therefore, we base the valuation process that follows in Chapter 6 on this conclusion of highest and best use.

Highest and Best Use – Karluk River Land:	Recreation
Highest and Best Use – Sturgeon River et al. Land:	Recreation

## **Chapter 6: Property Valuation – Comparative Market Analysis**

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### **Overview**

This chapter analyzes and compares sales of remote land to the subject. Based on our conclusion of highest and best use, we perform independent comparative analysis of the 1,008-acre Karluk River land and the remaining 1,183 acres fronting the Sturgeon River, Grant Lagoon, and Halibut Bay. As stated, private party acquisitions of remote land are scarce in the Kodiak market as well as alternative Alaska markets. Despite limited market activity, we analyze sufficient data to prepare a reliable sales comparison approach. Specifically, we rely on eight primary land sales in the comparative analysis of the appraised land. Moreover, we review remote land acquisitions by public agencies and special interest groups.

We employ a relative comparison analysis rather than a quantitative paired analysis as the method of comparing sales to the appraised land. The sales analysis makes comparisons a price per acre basis. Important comparative elements include financing terms, market conditions, conditions of sale, property rights conveyed, location, physical characteristics, and anticipated use.

### **Explanation of Sales Comparison Methodology**

The sales comparison approach is a market-based analysis that develops a value estimate by comparing sales of remote land to the subject. Typically, we select sales for comparison purposes because of their similarity. However, when comparing remote land we found few similarities exist that facilitate a paired sales analysis. Because of the imperfect nature of the market, we use a qualitative comparison technique. Known as a relative comparison analysis, this methodology is a study of market relationships without recourse to quantification. By analyzing and interpreting market behavior, we rate the elements of comparison that influence price as superior, inferior, or similar.<sup>23</sup> This methodology provides a scenario that establishes upper and lower value indicators. The relative comparison grids that face pages 53 and 54 summarize the rating of the primary land sales to the appraised land.

In Chapter 5, we determined the highest and best use of the Karluk River land is recreation. Therefore, we compare land sales with a

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<sup>23</sup> *The Appraisal of Real Estate*, by the Appraisal Institute, Eleventh Edition, 1996, p. 418.

similar highest and best use to the Karluk River land. The highest and best use of the Sturgeon River, Grant Lagoon, and Halibut is also recreation use, but the productivity differs because the ratio of strategic land is less. As described in Chapter 3, land areas with a narrow shape, steep slopes, and low-lying wetlands have marginal utility. These non-strategic areas contribute less value than those areas that enhance recreation utility. Thus, we adjust the land sales compared to the Sturgeon River, Grant Lagoon, and Halibut Bay land to reflect differences in productivity.

#### Analysis of Elements of Comparison

The first step of the market analysis is to determine what comparative elements cause sale prices to vary. We found that property rights conveyed, financing terms, conditions of sale, location, and physical characteristics have the greatest influence on market behavior and the price paid for remote land. In contrast, our analysis indicates that market conditions have had no measurable effect on price behavior over the past 20-year interval. Therefore, we do not make an adjustment for this comparative element. An analysis of the elements of comparison that affect the appraised land follows.

#### *Property Rights Conveyed Adjustment*

As stated, the south portion of the Sturgeon River land as well as the land located in Grant Lagoon and Halibut Bay is within the KNWR and subject to Section 22(g) of ANCSA. This provision states that the property is subject to the laws and regulations governing land use in a refuge. Thus, we analyze sale data to determine the market effect of this title encumbrance on price behavior.

Land Sale No. 5 has the same encumbrance and the buyer indicated that this restriction did not affect their purchase negotiations. Furthermore, we performed a paired analyses of 10-acre recreation lot sales fronting Uyak and Zachar Bays located within KNWR boundaries to similar lots fronting Amook Island outside of the refuge. This analysis indicates Section 22(g) of ANCSA has no measurable effect on price behavior. Based on this market analysis, we do not adjust the comparable sales for Section 22(g).

In addition, we analyze six that convey fee simple entitlements. We found that price behavior is similar unless geological reports indicate mineral resources are economically viable. We adjust Land Sale No. 8 because mineral resource potential affected buyer behavior and price negotiations. Conversely, the mineral potential of Land Sale Nos. 1, 2,

3, 4, and 7 was marginal and the buyers stated subsurface rights did not affect the sale price.

#### *Financing Terms Adjustment*

Terms that represent non-market financing require an adjustment to reflect their cash equivalent value. Owner financing facilitated purchase of four primary land sales. Down payments ranged from 13 to 26 percent, which we determined are representative of the market. Land Sale No. 3 had a Deed of Trust bearing seven percent interest over a seven-year term. This represents a favorable rate of interest compared to a market rate of 10 to 11 percent in 1989. Therefore, we adjust this land sale to reflect the cash equivalent value. Our analysis indicates terms of sale did not affect price negotiations of the other three owner-financed sales. Thus, we consider their sale price cash equivalent.

#### *Conditions of Sale Adjustment*

Adjustments for conditions of sale usually reflect the motivations of buyer and seller. We adjust two comparable sales for buyer motivations that affected price behavior. Specifically, the buyer of Land Sale No. 3 was willing to pay a premium price to satisfy a particular use of the land. The purchase price represents use value rather than market value.<sup>24</sup> Therefore, we make a downward adjustment for conditions of sale. Similarly, buyer motivations to consolidate land holding were an inducement to pay a higher price for Land Sale No. 8. Thus, we also adjust this sale downward to reflect this motivation.

#### *Market Conditions Adjustment*

Market conditions is an important comparative element because the sales that we analyze date to late 1989. During this interval, the market for remote land has experienced numerous changes that affect demand and anticipated use. However, our analysis indicates that the price paid for remote land today is similar to price behavior during the past decade.

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<sup>24</sup> Use value is defined "the value of specific property has for a specific use". *The Appraisal of Real Estate - Eleventh Edition*, by Appraisal Institute, p. 24.

### *Location Adjustment*

The principal comparative factors that cause a location adjustment are proximity of transport hub or infrastructure, cost of transport, weather and safety, and development pressure from a population center. We analyze three sales located in the Kodiak market, including one fronting the Sturgeon River. Our analysis indicates the location features of the Afognak Island sale are superior to the subject land. In contrast, the Sturgeon River sale has an inferior location when compared to the Karluk River land. Furthermore, we rate the location of the Uyak Bay sale as superior to the subject land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay, but similar to the Karluk River land.

Proximity and development pressure from the Anchorage and Kenai markets are superior location factors that affect the analysis of the Point Possession sale. Likewise, the location of the West Cook Inlet sale is superior to the Sturgeon River, Grant Lagoon, and Halibut Bay land. Transport costs and weather constraints of the Alagnak River sale are similar to the Karluk River land, but the absence of nearby public airports is an inferior location feature. Thus, we rate the location of this sale as marginally inferior. Because of logging infrastructure, protected shorelines, and proximity of several communities, we rate the location of the Southeast Alaska comparable sales as superior to the subject land. The preceding reasoning and analysis is the basis of the location adjustments summarized in the relative comparison grid facing pages 53 and 54.

### *Size Adjustment*

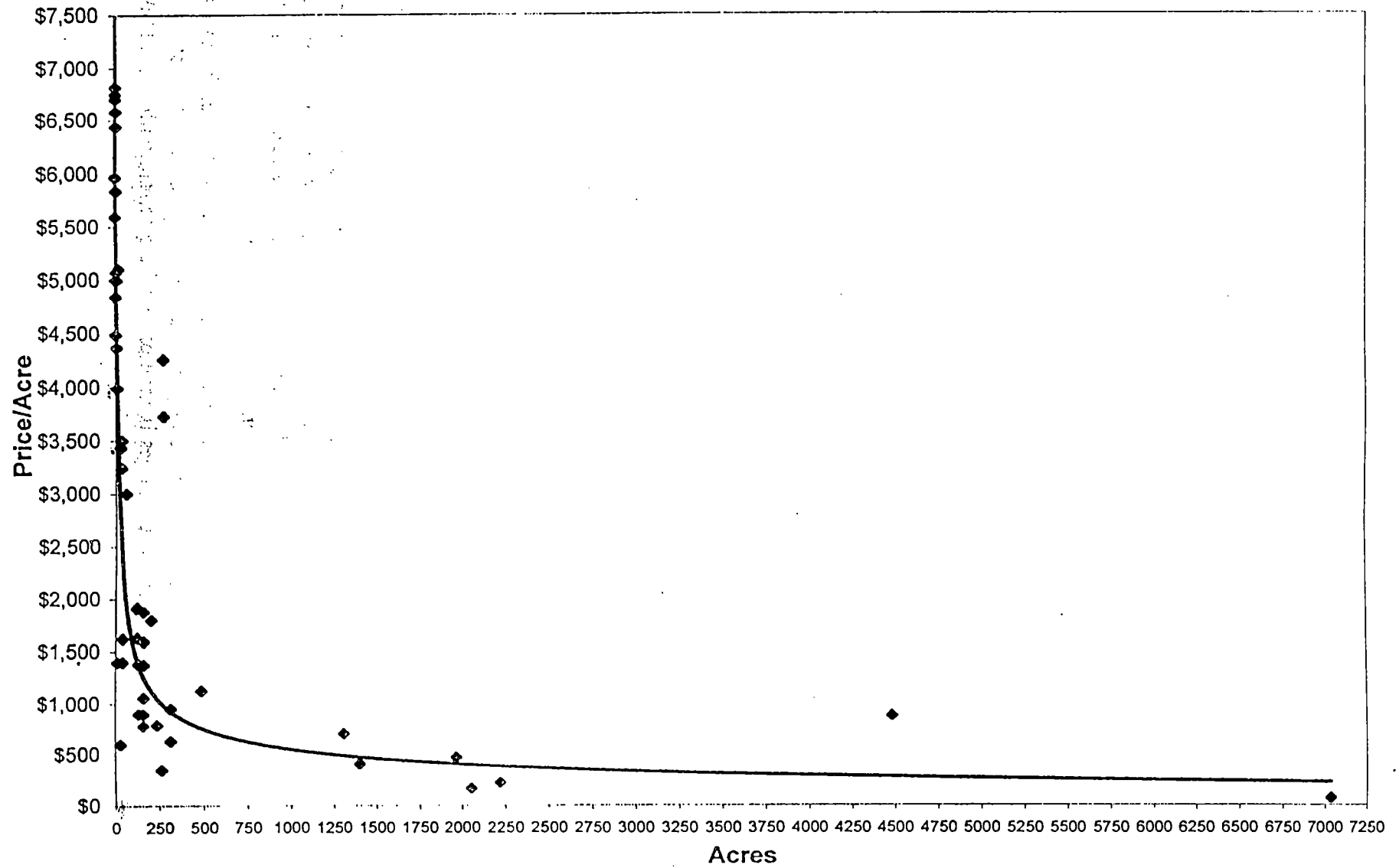
Although adjusting for size is a physical characteristic, we analyze this comparative element independent of the other physical features that influence market behavior. Adjusting for size certainly requires appraiser judgement, but we premise ours on price behavior observed throughout remote Alaska markets. Clearly, there is an inverse relationship between price and size. We predict a market trend line or "price curve" by inputting data from 55 remote land sales ranging from five to 7,000 acres.<sup>25</sup> Our analysis indicates that the price curve is nearly elastic for remote parcels greater than a 1,500 acres. For parcels less than 1,500 acres, the price curve is very steep up to 30 acres;

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<sup>25</sup> Sales include the primary land sales as well as land sales located in the Kodiak, Prince William Sound, Kenai Peninsula, Cook Inlet, and Alaska Peninsula market areas.



Relationship Between Price and Parcel Size



moderate sloping up to 160 acres; and then slopes gradually to the point of appearing elastic.

As a whole, our price curve is a reasonable depiction of market behavior. We use the price curve illustrated on the facing page as the basis of the size adjustment applied to the primary land sales. This adjustment represents a qualitative comparison rather than a quantitative measurement.

### *Physical Characteristics Adjustment*

Comparative physical features include access, type and extent of river or ocean frontage, topography, anadromous stream, anchorage potential, vegetation, and ratio of strategic or high-amenity land. Many of these physical features are interrelated, which makes the task of quantifying individual adjustments difficult. However, physical character has a significant influence on market behavior and represents an important comparative element. A brief discussion of the physical characteristics that affect our comparative analysis follows.

- Access comparisons analyze both economic and physical factors. Time and cost of access are as important as the physical enhancements or limitations. For example, land near a rural community with a public airstrip has superior access compared to land absent of these physical characteristics. Furthermore, land within a 30-minute flight of a transport hub has superior access compared to land that requires a two-hour flight. Moreover, remote land fronting a level, protected shoreline has superior access compared to land exposed to prevailing weather that has a bluff-type profile.
- River and ocean frontage comparisons analyze extent, shoreline profile, water depth, intertidal geology, frontage-to-size ratio, and fishing resources. Analysis of these features requires a collective rating to perform the comparative analysis. For example, land offering one-mile of ocean frontage with shallow offshore water and a steep intertidal profile may be inferior to land that has 2,000 feet of level, deep-water ocean frontage. Conversely, land fronting an anadromous stream is superior to land with river frontage absent of these fishing resources.
- Topography comparisons analyze slope, geological formations, low-lying wetlands, and utility. Land affected by steep mountain slopes is inferior to rolling terrain with well-drained soils.

- ☐ Anadromous stream comparisons analyze potential freshwater source as well as migrating fish. As explained, land fronting an anadromous stream is superior to land absent of this physical feature.
- ☐ Anchorage comparisons analyze water depth, tidal currents, exposure, and prevailing wind. Land afforded protected anchorage and deep offshore water is superior to land exposed to a mud flat and significant tidal change.
- ☐ Strategic land comparisons analyze the ratio of land area that offers high utility recreation potential for commercial or private purposes. We determine the ratio of strategic land by analyzing topographical maps, extent and type of ocean or river frontage, parcel shape and depth, etc. For example, land characterized by steep mountain slopes that extends inland for several miles and offers limited ocean or river frontage has a low ratio of strategic land. In contrast, land with rolling terrain that parallels a protected direct entry shoreline has a high ratio of strategic land. A comparison of the former example to the latter results in an inferior rating.

We summarize the rating of these physical characteristics in the relative comparison grid facing pages 54 and 55.

#### Analysis of Primary Land Sales

We rely on eight primary land sales in performing the comparative analysis of the appraised land. Location of the sales include Southwest Kodiak Island, Afognak Island, Alaska Peninsula, Kenai Peninsula, West Cook Inlet, and Southeast Alaska. Land Sale Nos. 1 through 5 are compared to the Karluk River land. In contrast, we compare Land Sale Nos. 1, 2, 5, 6, 7, and 8 to the Sturgeon River, Grant Lagoon, and Halibut Bay land.

Table 1 on the following page lists the primary land sales compared to the appraised land. A map depicting the general location of the comparable sales faces this table. We enclose additional mapping in the addenda with the data sheets to identify location and to illustrate physical features and boundaries. The discussion of each primary land sale that follows concludes with direct comparisons to the Karluk River land as well as the land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay.

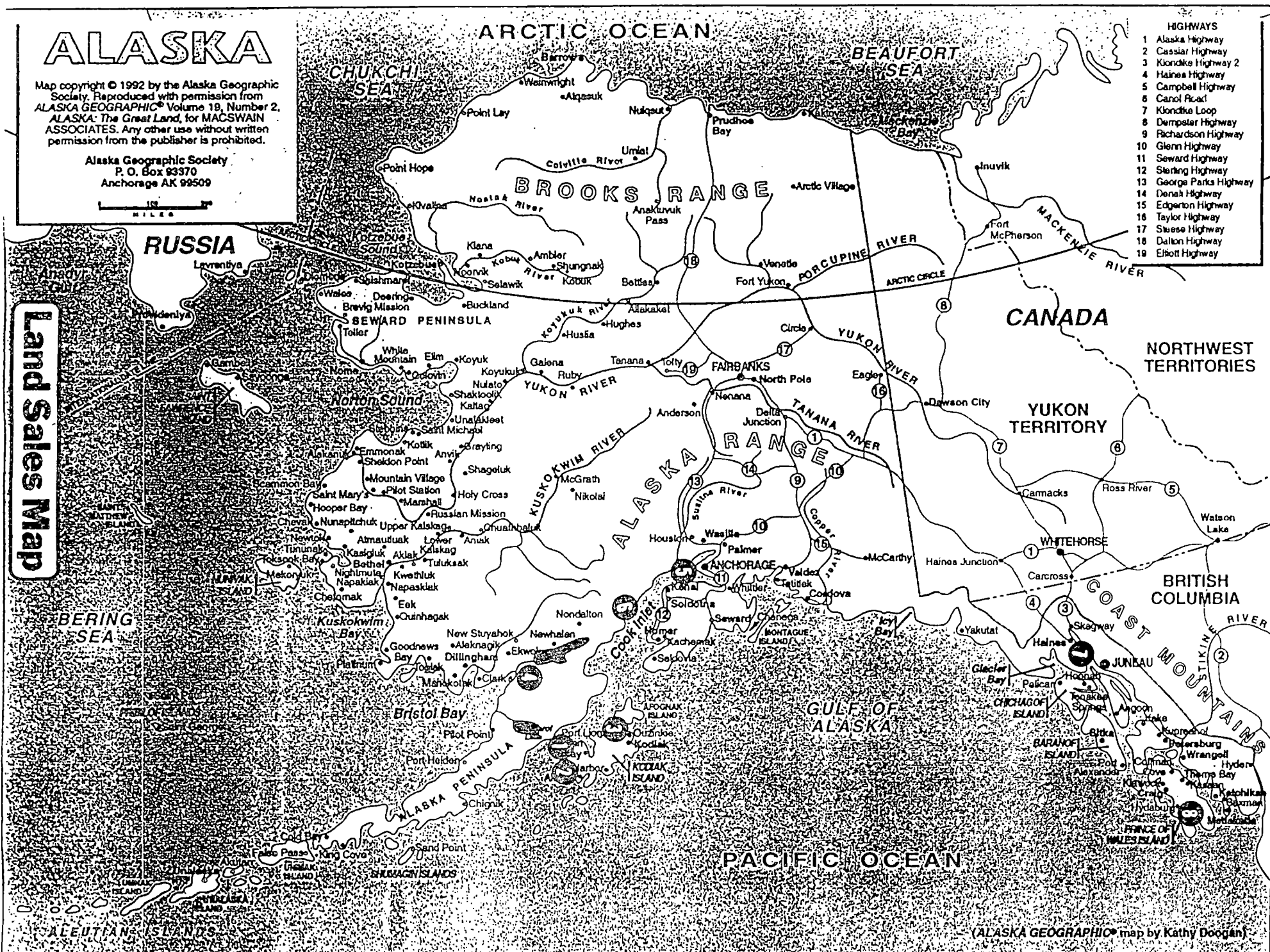
# ALASKA

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MILES

Land Sales Map



- HIGHWAYS
- 1 Alaska Highway
  - 2 Cassiar Highway
  - 3 Klondike Highway 2
  - 4 Haines Highway
  - 5 Campbell Highway
  - 6 Canol Road
  - 7 Klondike Loop
  - 8 Dempster Highway
  - 9 Richardson Highway
  - 10 Glenn Highway
  - 11 Seward Highway
  - 12 Sterling Highway
  - 13 George Parks Highway
  - 14 Denali Highway
  - 15 Edgerton Highway
  - 16 Taylor Highway
  - 17 Steese Highway
  - 18 Dalton Highway
  - 19 Elliott Highway

*Table 1: Summary of Primary Land Sales*

No	Location	Date	Sale Price <sup>26</sup>	Acres	\$/Acre	Anticipated Use	Description
1	E. bank of the Sturgeon River, about 2.5 miles from the mouth, Kodiak Island	5/92	\$126,000	159.97	\$788	Commercial recreation and speculation	Approximately 3,300 feet of river frontage; access affected by tide level
2	W. shore of the mouth of Uyak Bay, Kodiak Island	1/98	\$122,000	135	\$904	Commercial recreation and speculation	Approximately 4,600 feet of shoreline; acquired by adjacent property owner
3	N. shore of The Narrows, S. end of Afognak Island	11/89	\$1,020,000 <sup>27</sup>	273.65	\$3,728	Settlement and speculation	Approximately 10,600 feet of shoreline; dense growth of spruce; access affected by tide level
4	S. bank of the Alagnak River, about 23 miles SW of Igiugig, Alaska Peninsula	4/00	\$300,000	159.95	\$1,876	Commercial recreation and speculation	Approximately 4,000 feet of river frontage
5	Point Possession, N tip of Kenai Peninsula, 15 miles SW of Anchorage	5/98	\$3,900,000	4,481	\$870	Commercial recreation and speculation	4 to 4.5 miles of ocean frontage; level terrain
6	N shore of Chinita Bay, W. side of Cook Inlet	10/97	\$220,000	159.97	\$1,375	Recreation and speculation	Approximately 3,000 feet of shoreline; access affected by tide level
7	Glacier Point, W. shore of Chilkat Inlet, about 10 miles S. of Haines, Alaska	11/95	\$190,000	240	\$792	Recreation and speculation	Approximately 6,000 feet shoreline, grassland and dense growth of spruce
8	Hetta Inlet, Prince of Wales Island, about 35 miles SW of Ketchikan, Alaska	3/95	\$920,000	1,307	\$704	Limited recreation, natural resources, and speculation	9 mineral surveys; 1,100 feet of shoreline, steep terrain

### Land Sale No. 1

*Discussion and Analysis:* This 160-acre Native allotment fronts the east bank of the Sturgeon River approximately 2.5 miles from the mouth. Access from the river is limited to high tide intervals because of shallow water and shifting sandbars. Most of the river frontage rises abruptly from the riverbank to an undulating bench. We observed several low-lying areas with poorly drained soils, although a majority of the terrain is useable. The sale was contingent on the buyer accepting a one-year non-disturbance agreement pertaining to a two-

<sup>26</sup> Represents cash equivalent price.

<sup>27</sup> Excludes \$30,000 of value allocated to the improvements.

acre archeological site inspected by BIA staff. Neither the buyer nor seller felt the archeological restriction affected the sale price.

The buy acquired the land for a future lodge or as a staging area for fishing/hunting operations. In April 2000, The Conservation Fund acquired this 160 acres as well as two smaller parcels located on the spit at the mouth of the Sturgeon River. The purchase price was \$300,000 for all three parcels, which is similar to their 1989 and 1992 acquisition price.

*Comparison to Karluk River Land:* We adjust Land Sale No. 1 upward for inferior location, access, and extent and type of river frontage. Conversely, size differential requires a downward adjustment. We rate topography and upland utility as generally similar physical features. Despite a similar anticipated recreation use, the potential productivity of this sale is inferior to the subject. By comparison, Land Sale No. 1 is inferior to the Karluk River land. We emphasize this sale in the reconciliation process because of its Southwest Kodiak Island location.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* Land Sale No. 1 has similar location features and access constraints as the appraised land fronting the Sturgeon River. In contrast, the location is superior to the Grant Lagoon and Halibut Bay land, but access as inferior. Comparatively, we rate location and access of Land Sale No. 1 as generally similar. Regarding physical features, we rate size and topography as superior comparative elements. Despite less river frontage, the extent and quality of frontage relative to the land area is similar to the subject. In addition, the ratio of strategic land is greater because of steep slopes and low-lying wetlands that affect the subject. Thus, we rate this comparative element as superior. Furthermore, the productivity of the anticipated recreation use is superior to the subject. By comparison, Land Sale No. 1 is superior to the land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay. We emphasize this sale in the reconciliation process.

#### Land Sale No. 2

*Discussion and Analysis:* This 135-acre Native allotment fronts a small peninsula west of Harvester Island at the mouth of Uyak Bay. The community of Larsen Bay is about 10 miles southwest. The shoreline profile consists of small pocket beaches between rock embankments and outcroppings. The narrow neck of land extending to the peninsula provides direct entry access that offers adequate protection from prevailing weather and seas. Upland terrain has a

modest to moderate slope with a dense growth of alder and shrub vegetation.

The buyer owns adjacent land used as a residence and staging area for commercial fishing and hunting operations. Purchase motivations are to protect business interests as well as expand commercial recreation use. The exposure to the market was limited, although BIA requirements for selling allotment land were satisfied. The buyer had a special interest in acquiring the land, but stated he paid the "appraised value".

*Comparison to Karluk River Land:* We rate the location of Land Sale No. 2 as similar to the Karluk River land. Access and the extent and type of water frontage are inferior physical features. In contrast, size differential requires a downward adjustment. The remaining physical characteristics are generally similar. Although the anticipated use is similar, we consider the potential productivity inferior to the Karluk River land. By comparison, we rate Land Sale No. 2 as inferior to the subject and make a net upward adjustment. Moreover, we emphasize this sale in the reconciliation process because of location similarity.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* Uyak Bay is a superior location because of the proximity of Larsen Bay and the cost of transport. Regarding physical features, we make downward adjustments for size differential, topography, access, and ratio of strategic land. In contrast, the absence of an anadromous stream is an inferior comparative element. Furthermore, we rate the productivity of the anticipated recreation use as superior to the subject. By comparison, Land Sale No. 2 indicates a net downward adjustment. We emphasize this sale in reconciling a value conclusion for the land located in the Sturgeon River, Grant Lagoon, and Halibut Bay.

### Land Sale No. 3

*Discussion and Analysis:* This 274-acre parcel consists of two contiguous Native allotments that offer about two miles of ocean frontage on The Narrows at the east entrance to Raspberry Strait. The shoreline is predominately a low-bank profile, although we observed direct entry access near the east property boundary. However, shallow offshore waters adversely affect access and anchorage potential during low tide intervals. Near-shore topography has a modest slope with the interior increasing to an elevation of approximately 500 feet. We reviewed a 1988 timber appraisal that identifies 150 acres of merchantable timberland. The remaining acreage consists of immature spruce, grasses, and berries.

Terms of sale included a \$994,375 Deed of Trust bearing a seven-percent interest paid over seven years. We consider this interest rate below market because 10 to 11 percent represented the prevailing rate in 1989. Therefore, we adjust this sale to a cash equivalent value of \$1,050,000. In addition, a residence, several outbuildings, and a small dock improved the land. Based on data obtained from the broker, the value contribution of the improvements is \$30,000.

Significantly, the negotiated sale price was nearly double a market value appraisal prepared by BIA staff. The broker stated the buyer was willing to pay a higher price because the property satisfied their desire to construct a remote community. Specifically, the property is proximate to commercial fisheries, fish processing, and a port for goods and services. In addition, a mature growth of spruce represented a source of construction materials. Based on our analysis, the purchase price represents use value rather than market value. Thus, an adjustment for conditions of sale is necessary when performing the comparative analysis.

The conveyance agreement prohibits commercial use of the timber, but allows personal use for construction of residences and other outbuildings. This title restriction has an adverse affect on the timber value from a market perspective, but it enhances use value to the buyer. Currently, 127 acres (Tract A) of this property is listed for sale at \$494,363 or \$3,900 per acre.<sup>28</sup> The broker indicated limited interest by serious buyers. She also stated the price is negotiable.

*Comparison to Karluk River Land:* The principal comparative element is conditions of sale, which is intrinsic to the anticipated use. Specifically, we adjust Land Sale No. 3 downward because the price paid reflects use value rather than market value. In addition, the proximity of Kodiak facilitates a superior location rating. Moreover, size differential requires a downward adjustment. Conversely, access, type of ocean frontage, anchorage potential, and the absence of an anadromous stream are inferior physical characteristics. By comparison, we rate Land Sale No. 3 as superior to the Karluk River land. However, we weigh this sale cautiously in the reconciliation process because conditions of sale had a significant influence on price.

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<sup>28</sup> Listed since September 1998 by Sharlene Sullivan, owner and broker of Associated Island Brokers, Inc.



#### Land Sale No. 4

*Discussion and Analysis:* This 160-acre Native allotment fronts the south bank of the Alagnak River approximately 20 miles from the confluence of the Kvichak River. Several braids in the river create sandbars that facilitate access by small aircraft. In addition, the Alagnak River allows floatplane and boat access. A majority of the terrain has a gentle slope and well-drained soils with vegetation consisting of spruce, alder, and assorted shrubs and grass. We also observed pockets of low-lying wetland areas. We rate the 160 acres as high-amenity land suitable for recreation development. Furthermore, the Alagnak River, Kvichak River, Nonviaunk River, and Nushagak River offer fish and game resources that appeal to sport fishing and hunting. Therefore, this land has the amenities required to support commercial recreation use.

*Comparison to Karluk River Land:* Although transport costs and weather constraints are similar, we rate location as marginally inferior because of the proximity of infrastructure and an economic hub for goods and services. Excluding size differential, the physical features of Land Sale No. 4 are generally similar to the subject. Moreover, the sport fishing and hunting potential of this land has similar appeal and use potential. Therefore, we consider the economic productivity of the land is generally similar to the subject. By comparison, we rate Land Sale No. 4 as superior to the subject with the principal adjustment reflecting the difference in size. We emphasize this sale in the reconciliation process because of similarities in location, physical character, and economic potential.

#### Land Sale No. 5

*Discussion and Analysis:* This 4,481-acre parcel occupies the north tip of the Kenai Peninsula (Point Possession) strategically situated some 15 miles southwest of Anchorage. Located in the Kenai Peninsula Borough, the land is subject to real estate taxation. It is also in the Kenai National Wildlife Refuge and subject to Section 22(g) of ANCSA. The buyer is aware that this provision may affect development potential, but they accepted the investment risk. Terms of sale are \$700,000 down with two annual payments of \$456,898 (including interest) and a three-year payoff. We consider the sale price cash equivalent.

In addition, the broker informed the buyer of potential tax benefits available by encumbering portions of the land with a conservation easement that restricts development. The buyer considered the potential tax benefits, but would not state whether this factor affected

the negotiated sale price. Therefore, we do make an adjustment for conditions of sale.

A majority of the shoreline (4 to 4.5 miles) has a high-bluff profile that restricts upland access by boat. However, the north tip has an accessible direct entry shoreline and several lakes allow access by aircraft. Terrain is gently rolling with numerous lakes and ponds observed that enhance recreation utility and appeal. Because of these physical features, the ratio of high-amenity land exceeds most remote land of similar size. A 30-foot wide pipeline easement that transverses the north end of the property does not affect the anticipated use.

The property was on the market for eight years before consummation of a sale. This is an exceptionally long period regardless of the character of the land. Purchase motivation of the out-of-state buyer is to develop a commercial recreation property linked to the tourism industry. To date, the buyer has not been able to secure financing to facilitate development. In fact, the buyer failed to make their annual payment per sale terms and foreclosure was set for mid-December 1999. A payment of \$50,000 delayed foreclosure for 30 days. At the expiration of the extension, the property owner declared Chapter 11 bankruptcy.

*Comparison to Karluk River Land:* Land Sale No. 5 has a superior location attributed to the proximity of Anchorage and rural expansion northward from Kenai. Although the extent of ocean frontage compares to the subject's river frontage, the waterfront ratio and access potential are inferior. Furthermore, the absence of an anadromous stream, anchorage limitations, and the ratio of strategic land are inferior physical features. In addition, we adjust this sale upward for size differential. By comparison, the net adjustment indicated to Land Sale No. 5 is upward. We emphasize this sale in the reconciliation process.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* The location of Land Sale No. 5 is superior to the subject land. Furthermore, tidal influences do not affect access potential. Therefore, we rate access as a superior physical characteristic. In addition, topographical features (including presence of numerous lakes) and the ratio of strategic land are superior comparative elements. In contrast, size differential requires an upward adjustment. Regarding anticipated use, the commercial potential of this sale is greater than the subject land. By comparison, we rate Land Sale No. 5 as superior to the Sturgeon River, Grant Lagoon, and Halibut Bay land. Furthermore, we emphasize this sale in the reconciliation process.

Land Sale No. 6

*Discussion and Analysis:* This 160-acre Native allotment fronts the north shore of Chinitna Bay at the mouth of Middle Creek. It is within the Kenai Peninsula Borough as well as the wilderness boundaries of Lake Clark National Park. A tidal mud flat that extends to the head of the bay restricts shoreline access. Topography is generally level with vegetation consisting primarily of spruce and alder. Despite access limitations, the physical features of the land are suitable for recreation development.

Marketing of the land started in 1992/93 with an initial asking price of \$1,600,000. Reduction of the listing price to \$250,000 in 1996 facilitated a sale within 18 months. The out-of-state buyer acquired the land as a private retreat.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* Land Sale No. 6 has a superior location, but inferior access because of the extended tidal mud flat. Regarding physical features, we rate size differential, topography, and ratio of strategic land as superior comparative elements. Conversely, anchorage potential and the absence of an anadromous stream are inferior physical characteristics. By comparison, we rate Land Sale No. 6 as superior to the Sturgeon River, Grant Lagoon, and Halibut Bay land. We give greater emphasis to this sale in reconciling a value conclusion.

Land Sale No. 7

*Discussion and Analysis:* This 240-acre parcel occupies Glacier Point some 10 miles south of Haines. Frontage on the south shore of Chilkat Inlet that measures about 6,000 feet has an accessible direct entry profile. A stream meanders through the west portion of the land to a small pond. Terrain is generally level with grass-type vegetation observed near-shore and primarily Sitka spruce on the interior. The buyer indicated the spruce trees do not represent merchantable timberland. Furthermore, mineral potential is nominal. Therefore, the subsurface estate did not contribute value to land.

The buyer is a knowledgeable market participant who owns other remote land in the Haines area. In fact, we found other sales proximate to the acquired land that supports the purchase price. The motivation of purchase is speculation with recreation the anticipated use.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* We do not adjust Land Sale No. 7 for property rights conveyed because of the absence of mineral potential. The proximity of a

transport hub and other infrastructure are superior location factors that require a downward qualitative adjustment. In addition, access, topography, anchorage potential, and ratio of strategic land are superior physical features. We also adjust this sale downward for size differential. Anticipated use for recreation purposes is a similar comparative element. By comparison, the overall rating of Land Sale No. 7 is superior to the land located fronting the Sturgeon River, Grant Lagoon, and Halibut Bay. However, we give less emphasis to this sale because of the Southeast Alaska location.

#### Land Sale No. 8

*Discussion and Analysis:* This 1,307-acre parcel is located on the south end of Prince of Wales Island, some 35 miles southeast of Ketchikan. It contains nine mineral surveys with six different locations in proximity of Copper, Hetta, and Grace Mountains. One survey has about 1,100 feet ocean frontage that has direct entry access and another offers frontage on floatplane accessible Summit Lake. The remaining surveys, which total 1,140 acres, are accessible by helicopter or foot. Steep slopes characterize a majority of the terrain, although approximately 100 acres has recreation development potential. We consider this area strategic land, which develops a ratio of eight percent.

The buyer stated 80 acres had merchantable timber with an estimated stumpage value of \$160,000. In addition, they allocated a value of \$100,000 to the subsurface estate. Therefore, the indicated price adjusted for timber and the mineral potential is \$505 per acre ( $\$660,000 \div 1,307$  acres).

Several years of marketing at an \$1.5 million asking price generated limited interest before negotiations with the adjoining landowner. The buyer, Sealaska Corporation, stated they paid a premium price because of their desire to consolidate holdings. Based on buyer motivations, we adjust this sale downward for conditions of sale.

*Comparison to Sturgeon River, Grant Lagoon, and Halibut Bay Land:* We adjust Land Sale No. 8 downward for property rights conveyed and merchantable timberland. Based on discussions with the buyer, the purchase price adjusted for mineral and timber resources is about \$505 per acre. This sale is similar in size, but inferior to the important physical characteristics that influence market behavior. Despite a superior location and buyer motivation, we rate Land Sale No. 8 as inferior to the subject after quantitative adjustments for

Table 2: Relative Comparison Adjustment Grid – Karluk River Land

Comparative Element	Karluk River	Sale No. 1: Sturgeon River	Sale No. 2: Uyak Bay	Sale No. 3: Afognak Island	Sale No. 4: Alagnak River	Sale No. 5: Point Possession
Cash Equivalent Price	NA	\$126,000	\$122,000	\$1,020,000	\$300,000	\$3,900,000
Price Per Acre	NA	\$788	\$904	\$3,728	\$1,876	\$870
Property Rights	Surface estate	Fee simple estate -similar-	Fee simple estate -similar-	Fee simple estate -similar-	Fee simple estate -similar-	Surface estate -similar-
Conditions of Sale	Assumed Typical	-similar-	-similar-	-superior-	-similar-	-similar-
Market Conditions	6/00	5/92 -similar-	1/98 -similar-	11/89 -similar-	4/00 -similar-	5/98 -similar-
Location	Karluk River West Kodiak Island	Sturgeon River -inferior-	Uyak Bay -similar-	Afognak Island -superior-	Alaska Peninsular -inferior-	Kenai Peninsula -superior-
Physical Characteristics						
Land Area – Acres	1,008 acres	159.97 acres -superior-	135 acres -superior-	273.65 acres -superior-	159.95 acres -superior-	4,481 acres -inferior-
Access	Boat, floatplane, trail	-inferior-	-inferior-	-inferior-	-similar-	-similar-
River or Ocean Frontage	6± miles river frontage; good utility	3,300 feet - river -inferior-	4,600 feet – ocean -inferior-	10,600 – ocean -inferior-	4,000 feet – river -similar-	4± miles – ocean -inferior-
Topography	Level to relatively steep; good utility	-similar-	-similar-	-similar-	-similar-	-similar-
Anadromous Stream	Yes	-similar-	-inferior-	-inferior-	-similar-	-inferior-
Anchorage Potential	Yes	-inferior-	-similar-	-inferior-	-similar-	-inferior-
Ratio of Strategic Land	100%	-similar-	-similar-	-similar-	-similar-	-inferior-
Overall Relative Comparison Rating	NA	Inferior	Inferior	Superior	Superior	Inferior

natural resource potential.<sup>29</sup> We rely on this sale to establish the lower value limit for the Sturgeon River, Grant Lagoon, and Halibut Bay land. In addition, this sale compares to the subject in size as well as the benefits of the non-contiguous character of the land.

**Reconciliation of  
Karluk River Land**

We rely on five primary land sales in our comparative analysis of the 1,008-acre Karluk River land. Before adjustments, they range from \$788 to \$3,728 per acre. After performing our relative comparison analysis summarized on the facing page, we rate three sales as inferior and two as superior. The value indicated by comparative analysis is greater than \$904 per acre but less than \$1,876 per acre. In reconciling the primary land sales, we give greater emphasis to Land Sale Nos. 1, 2, 4, and 5. In conclusion, the analysis supports a value of \$1,400 to \$1,500 per acre for the subject land, which develops the following range.

**Karluk River: 1008 acres @ \$1,400/acre = \$1,411,200**

**Karluk River: 1008 acres @ \$1,500/acre = \$1,512,000**

Because of location, ratio of strategic land area, extent and type of river frontage, and the recreation appeal of the Karluk River, a value near the upper end of the indicated range has market support. Based on the data, reasoning, and analysis, we estimate the value of the Karluk River land is \$1,500,000.

**Estimated Value of Karluk River Land      \$1,500,000**

**Reconciliation of  
Sturgeon River,  
Grant Lagoon, and  
Halibut Bay Land**

We rely on six primary sales in our comparative analysis of the 1,183-acre Sturgeon River, Grant Lagoon, and Halibut Bay lands. Only one sale consists of non-contiguous land areas similar to the subject land. However, we determined from our highest and best use analysis that the non-contiguous character enhances productivity because the most probable buyer will desire multiple locations for their recreation use. Thus, we do not discount the subject lands for assemblage.

Before adjustments, they range from \$704 to \$1,375 per acre. The relative comparison analysis summarized on facing page indicates all

<sup>29</sup> Before quantitative adjustments for mineral potential and merchantable timberland, the overall rating of Land Sale No. 8 is superior to the subject. Thus, the relative comparison grid facing page 54 indicates a superior rating.

Table 3: Relative Comparison Adjustment Grid – Sturgeon River, Grants Lagoon, and Halibut Bay Land

Comparative Element	Sturgeon River, Grants Lagoon, Halibut Bay	Sale No. 1: Sturgeon River	Sale No. 2: Uyak Bay	Sale No. 5: Point Possession	Sale No. 6: Chinitna Bay	Sale No. 7: Glacier Point	Sale No. 8: Hetta Inlet
Cash Equivalent Price	NA	\$126,000	\$122,000	\$3,900,000	\$220,000	\$190,000	\$920,000
Price Per Acre	NA	\$788	\$904	\$870	\$1,375	\$792	\$704
Property Rights	Surface estate	Fee simple estate -similar-	Fee simple estate -similar-	Surface estate -similar-	Surface estate -similar-	Fee simple estate -similar-	Fee simple e -superior-
Conditions of Sale	Assumed Typical	-similar-	-similar-	-similar-	-similar-	-similar-	-superior-
Market Conditions	6/00	5/92 -similar-	1/98 -similar-	5/98 -similar-	10/97 -similar-	11/95 -similar-	3/95 -similar-
Location	West Kodiak Island	Sturgeon River -similar-	Uyak Bay -superior-	Kenai Peninsula -superior-	West Cook Inlet -superior-	Haines -superior-	Ketchikan -superior-
Physical Characteristics							
Land Area – Acres	1,183 acres	159.97 acres -superior-	135 acres -superior-	4,481 acres -inferior-	159.97 acres -superior-	240 acres -superior-	1,307 acres -similar-
Access	Boat, floatplane	-similar-	-superior-	-superior-	-inferior-	-superior-	-inferior-
River or Ocean Frontage	3.5 miles river; 6.2 miles ocean	3,300 feet - river -similar-	4,600 feet – ocean -similar-	4± miles – ocean -similar-	3,000 feet – ocean -similar-	6,000 feet – ocean -similar-	1,100 feet – ocean -inferior-
Topography	Level to steep	-superior-	-superior-	-superior-	-superior-	-superior-	-inferior-
Vegetation - Timber	Shrubs, grass - None	-similar-	-similar-	-similar-	-similar-	-similar-	-superior-
Anadromous Stream	Yes	-similar-	-inferior-	-inferior-	-inferior-	-inferior-	-inferior-
Anchorage Potential	Yes	-similar-	-similar-	-similar-	-inferior-	-superior-	-inferior-
Ratio of Strategic Land	75-80%	-superior-	-superior-	-superior-	-superior-	-superior-	-inferior-
Overall Relative Comparison Rating	NA	Superior	Superior	Superior	Superior	Superior	Superior

six sales are superior to the subject land. However, by performing quantitative adjustments to Land Sale No. 8 for property rights conveyed and timber resources, we establish a lower value limit of \$505 per acre. Therefore, our comparative analysis indicates the value of subject land is greater than \$505 per acre but less than \$788 per acre. We give greater emphasis to Land Sale Nos. 1, 2, 5, 6, and 8 in the reconciliation process. In conclusion, the analysis supports a value of \$550 to \$600 per acre for the subject land, which develops the following range.

Sturgeon River et al.: 1,183 acres @ \$550/acre = \$650,650

Sturgeon River et al.: 1,183 acres @ \$600/acre = \$709,800

Because of the non-contiguous character of the land, extent of ocean frontage, and ratio of strategic land, we conclude with value near the upper end of the indicated range. Based on the data, reasoning, and analysis, we estimate the value of the Sturgeon River, Grant Lagoon, and Halibut Bay land is \$700,000.

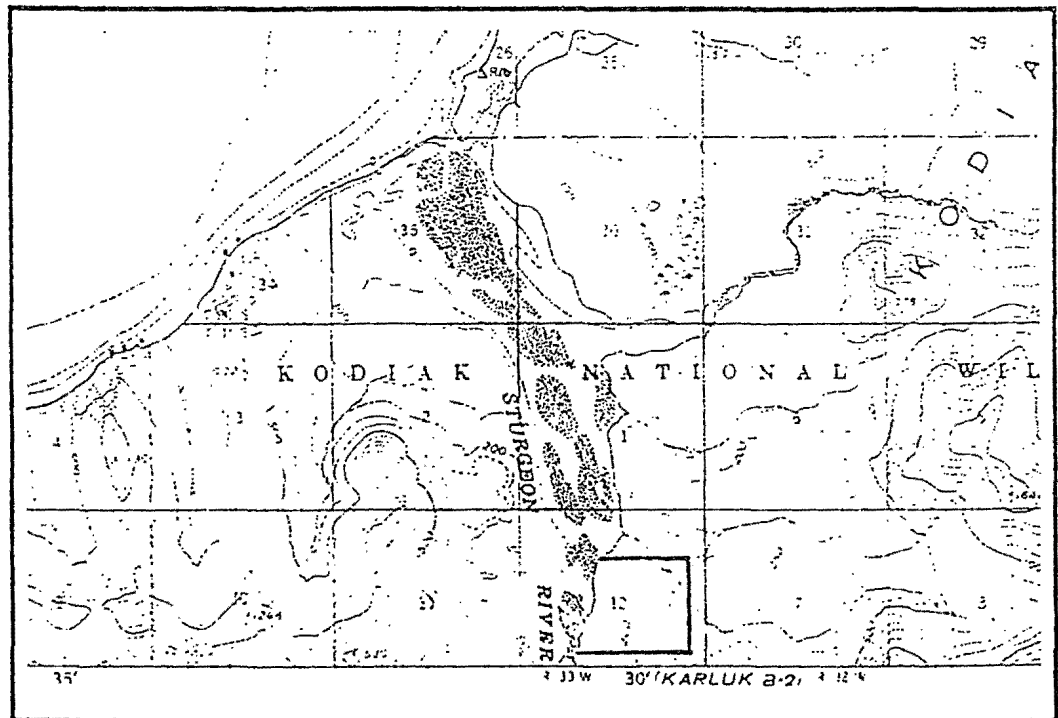
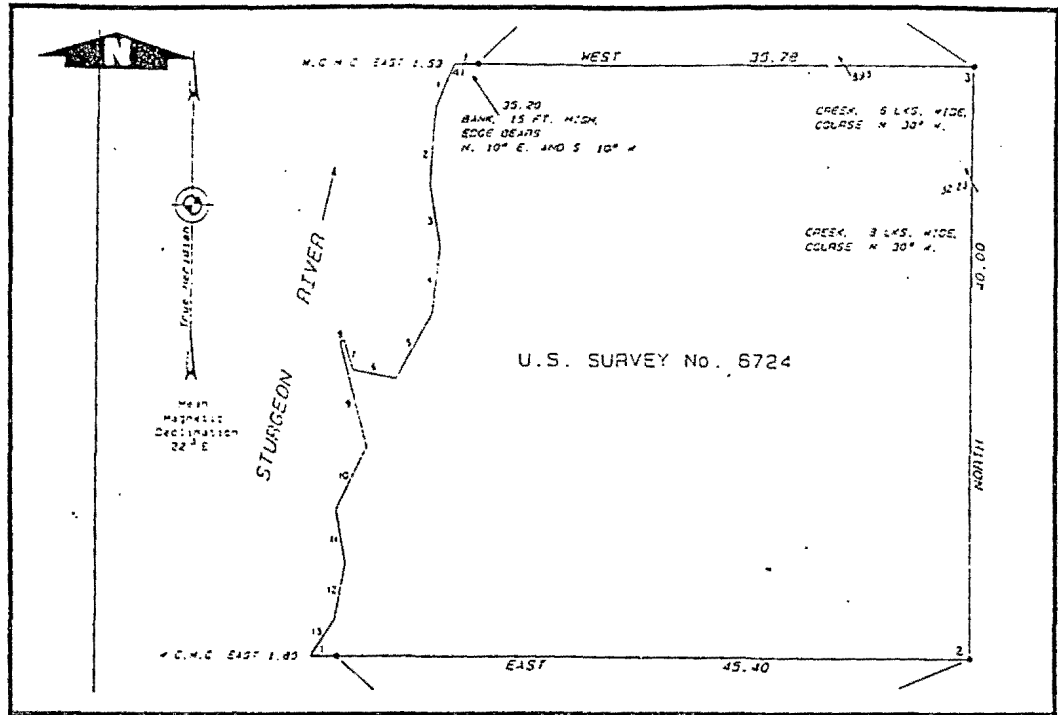
**Estimated Value of Sturgeon River et al. Land \$700,000**

**Conclusion of Land Value**

Significantly, we premise the value estimate of the Karluk River land and the land fronting the Sturgeon River, Grant Lagoon, and Halibut Bay on a reasonable exposure time of one to three years. Moreover, the foundation of valuation process is our conclusion of highest and best use. By performing a comparative sales analysis, we conclude with a market value estimate, as of June 5, 2000, of \$2,200,000 for the appraised land. Our opinion reflects the value of surface estate entitlements as defined by ANCSA.

**Estimated Market Value of the Appraised Land \$2,200,000**



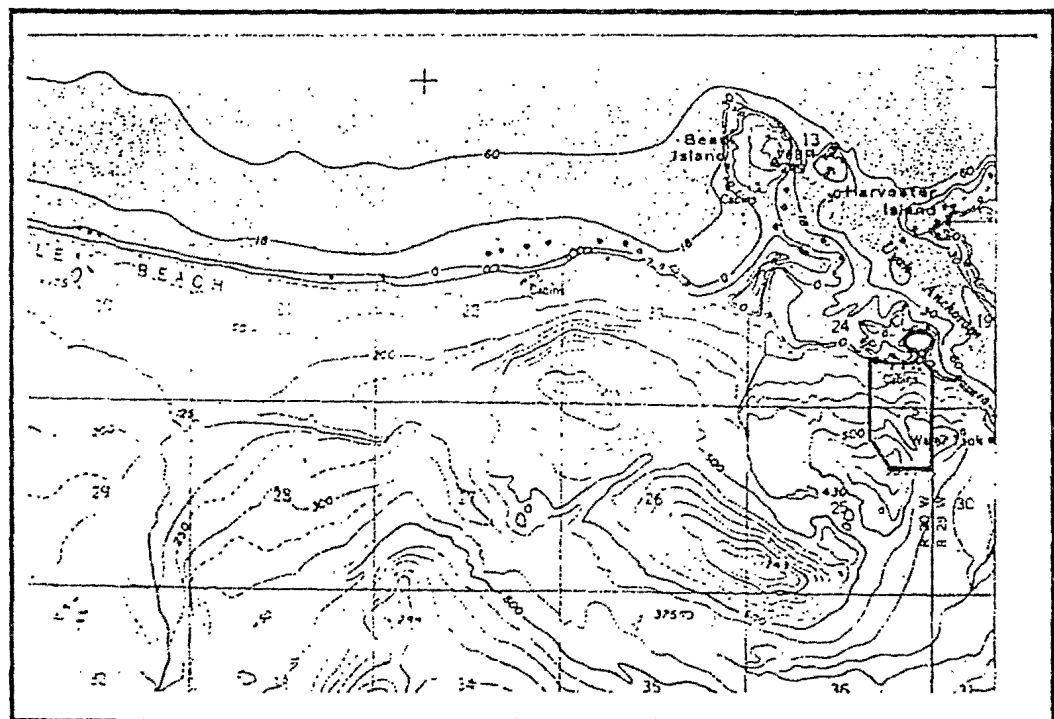
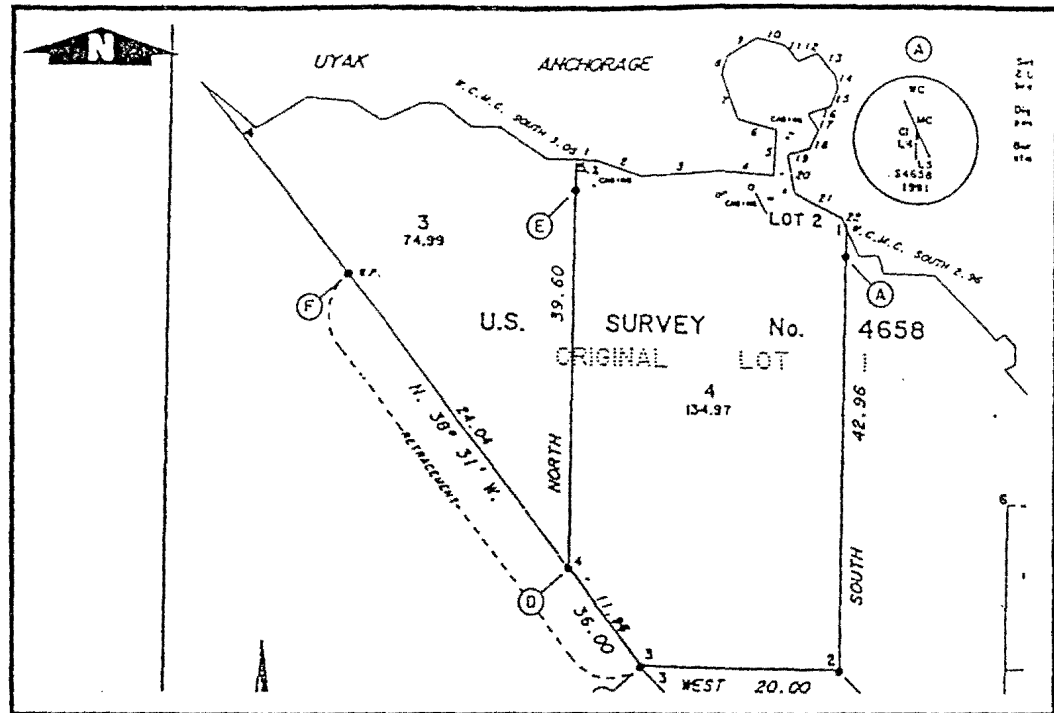


Comparable Land Sale No. 1

## Comparable Land Sale No. 1

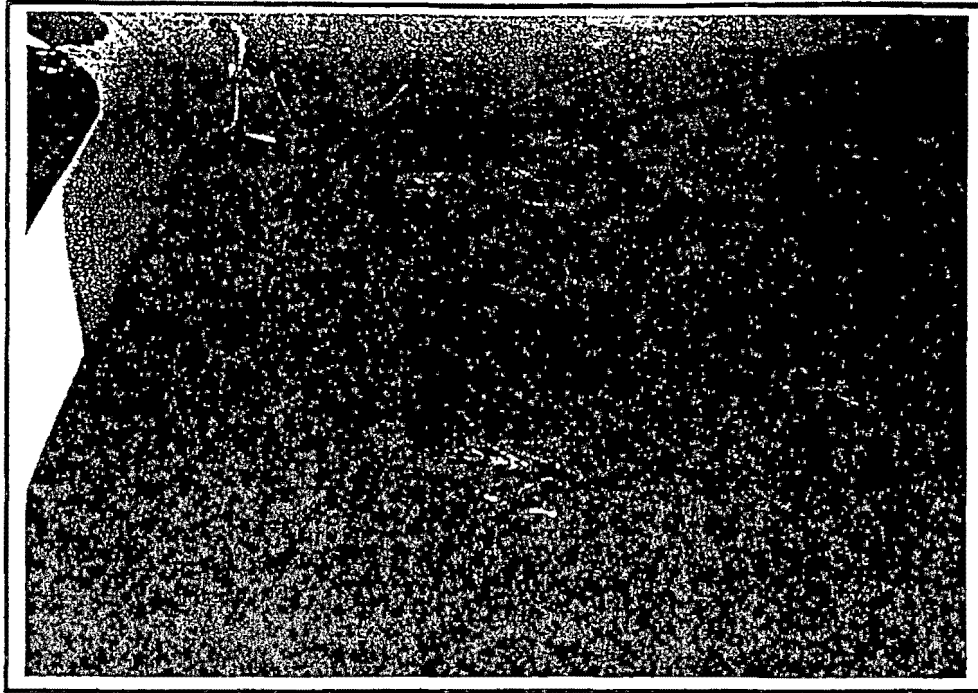


Location:	East bank of the Sturgeon River, approximately 2.5 miles from the mouth, west side of Kodiak Island, Alaska		
Legal Description:	US Survey 6724, located within Section 12, T31S, R33W, SM		
Grantor:	David W. Waselie	Instrument:	Memorandum of Agreement
Grantee:	Mike Cusack of Alaskan Outdoor Experience	Book/Page:	115/018
Sale Date:	5/92	Data Source:	Mike Cusack and MOA
Sale Price:	\$126,000	Confirmed By:	Dan Shantz
Cash Equivalent Price:	\$126,000	Property Rights:	Fee simple estate
Terms:	\$16,380 down; \$109,620 Deed of Trust; 8% interest; 30 year amortization (\$840/mth)		
Parcel Size:	159.97 acres	River Frontage:	3,300 feet
Zoning:	Conservation	Use at Sale:	Vacant
Access:	Boat, floatplane	Intended Use:	Commercial recreation
Easements/Restrictions:	See remarks below	Highest & Best Use:	Recreation; speculation
<b>Property Description:</b> This 160-acre Native allotment has approximately 3,300 feet of Sturgeon River frontage some 2.5 miles upriver from the mouth. Because of the tidal influence to the river, access is difficult during low tide intervals. A majority of the river frontage rises abruptly from the bank to an undulating bench. Low-lying areas with poorly drained soils are also present. Vegetation consists of low-lying shrubs, alder, grass, and berries. The physical character of the land is suitable for recreation use.			
<b>Remarks:</b> The sale was contingent on the buyer accepting a one-year non-disturbance agreement pertaining to two acre acres subject to an archeological inspection by BIA staff. This restriction did not affect the price negotiations of the buyer and seller. This land was acquired by The Conservation Fund in April 2000 with two other parcels located at the mouth of the Sturgeon River. The purchase price for all three parcels was similar to the price paid by the seller.			
Price Analysis	\$126,000	÷	159.97 Acres = \$788/Acre

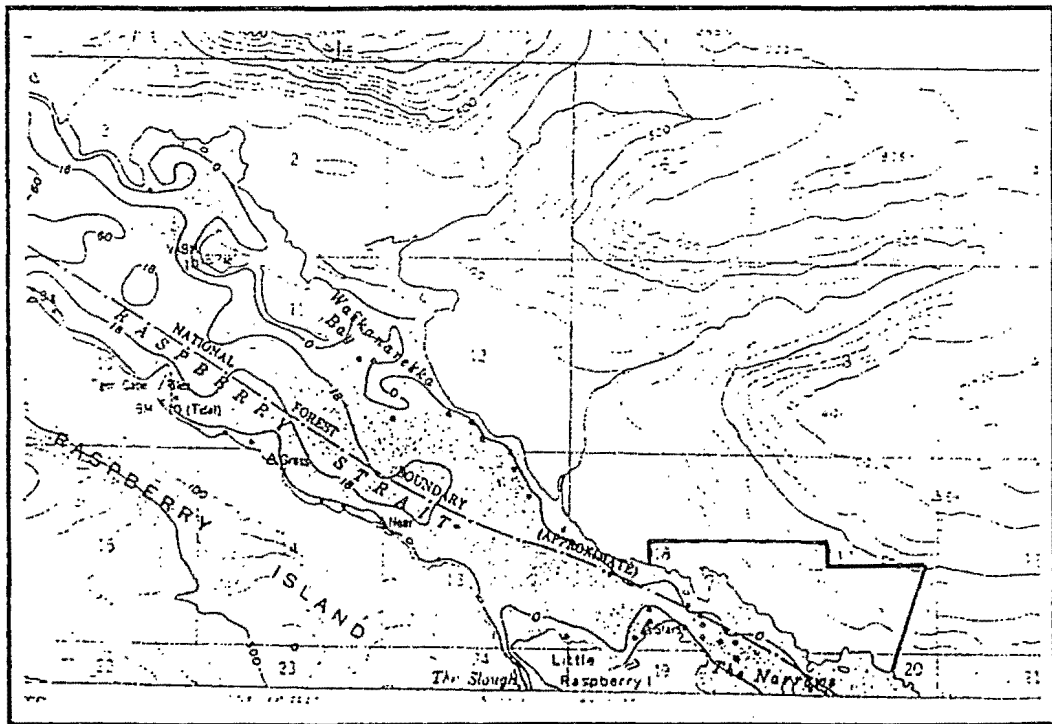
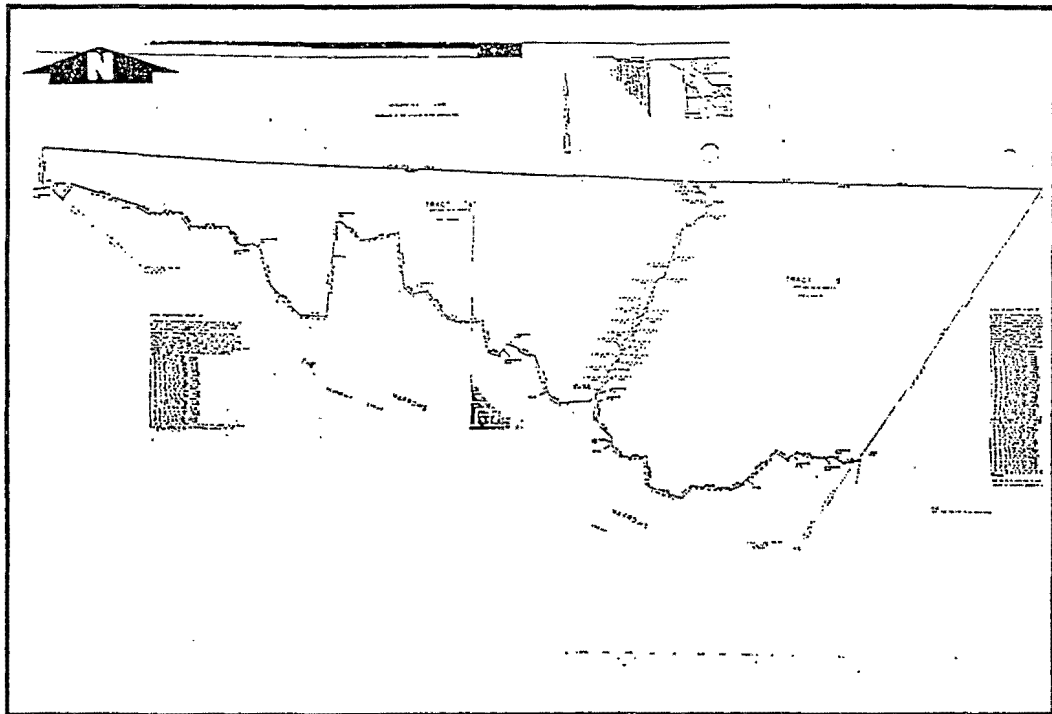


Comparable Land Sale No. 2

## Comparable Land Sale No. 2

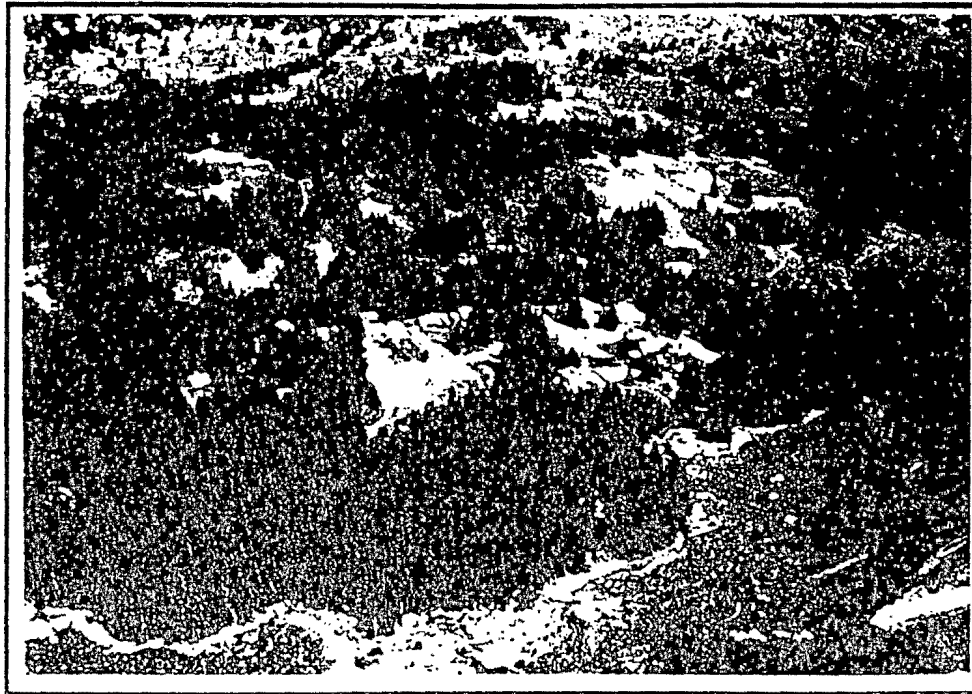


<b>Location:</b>		West shore of the mouth of Uyak Bay (proximate to Harvester Island), 10 miles north of Larsen Bay, west side of Kodiak Island, Alaska	
<b>Legal Description:</b>		Lots 2 and 4, US Survey located in Sections 24 and 25, T29S, 30W, SM	
<b>Grantor:</b>	Clyda G. Christensen	<b>Instrument:</b>	Deed
<b>Grantee:</b>	Duncan Fields	<b>Book/Page:</b>	155/945
<b>Sale Date:</b>	1/98	<b>Data Source:</b>	Duncan Fields; Deed
<b>Sale Price:</b>	\$122,000	<b>Confirmed By:</b>	Dan Shantz
<b>Cash Equivalent Price:</b>	\$122,000	<b>Property Rights:</b>	Fee simple estate
<b>Terms:</b>	Cash		
<b>Parcel Size:</b>	135 acres	<b>Ocean Frontage:</b>	4,600 feet
<b>Zoning:</b>	Conservation	<b>Use at Sale:</b>	Vacant
<b>Access:</b>	Boat, floatplane	<b>Intended Use:</b>	Support adjacent commercial fishing and hunting operations
<b>Easements/Restrictions:</b>	None known	<b>Highest &amp; Best Use:</b>	Recreation; speculation
<b>Property Description:</b> This 135-acre Native allotment is located west of Harvester Island at the mouth of Uyak Bay. A small peninsula extension provides protection to the east shoreline. The shoreline is predominately rock embankments, although several pocket beaches provide direct entry access. Upland terrain has a modest to moderate slope with vegetation consisting of alder and shrubs. The physical character of the land is suitable for recreation use.			
<b>Remarks:</b> The buyer owns the adjacent property used as a residence that support commercial fishing and hunting operations. Buyer motivations are to protect his business interests and to expand staging area.			
<b>Price Analysis</b>	\$122,000	÷	135 Acres = \$904/Acre

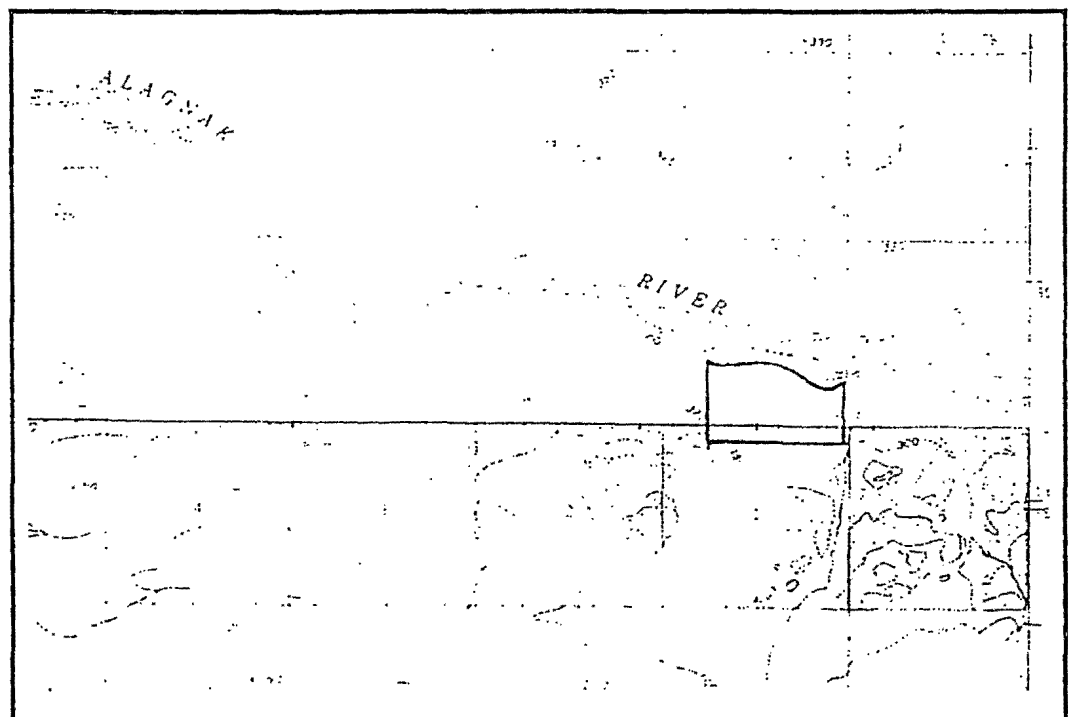
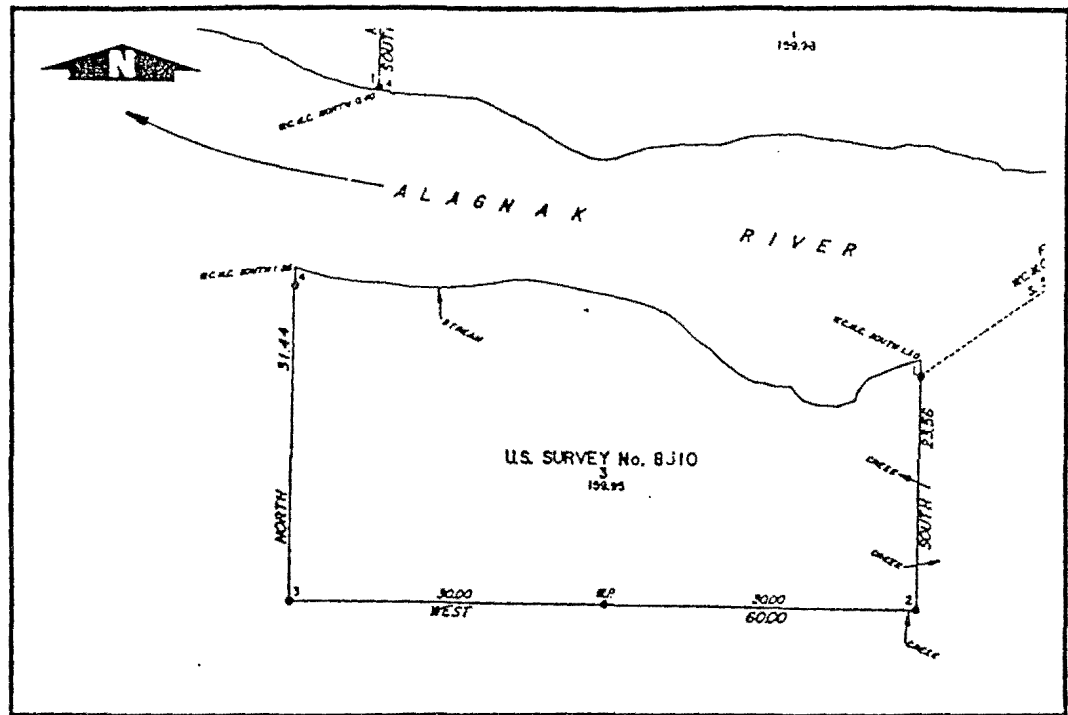


Comparable Land Sale No. 3

## Comparable Land Sale No. 3

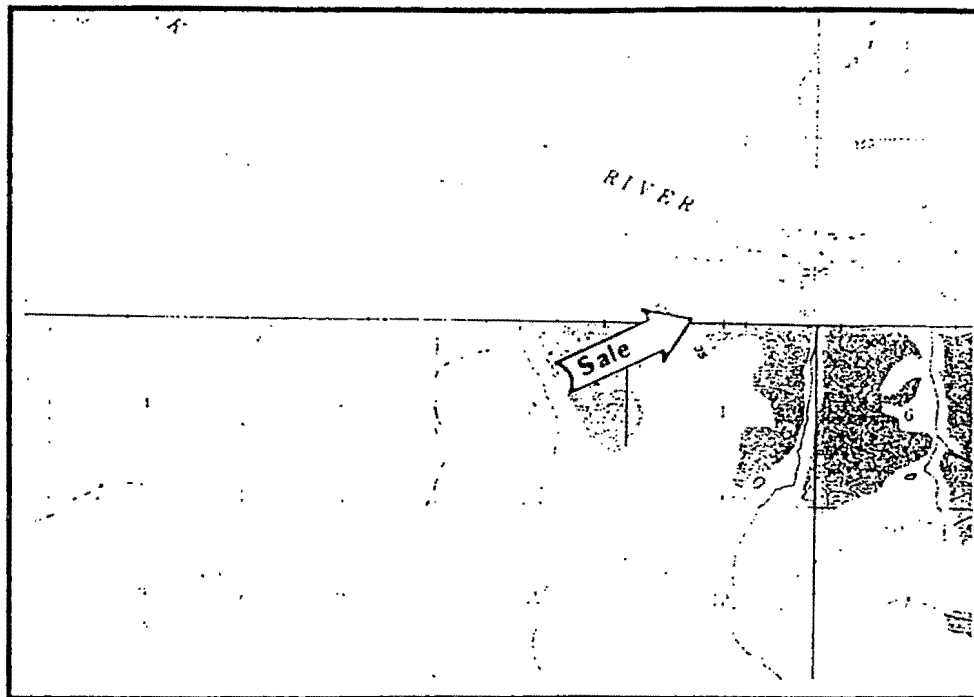


Location:	North shore of The Narrows, south end of Afognak Island, Alaska		
Legal Description:	Tracts A and B, Plat 89-8-RS, located in Sections 17, 18, and 20 T25S, R 22W, SM		
Grantor:	Enola and Mike Mullan	Instrument:	Memorandum of Agreement
Grantee:	Aleneva Joint Venture	Book/Page:	98/972
Sale Date:	11/89	Data Source:	Sharlene Sullivan (broker); Mike Mullan; MOA
Sale Price:	\$1,194,375	Confirmed By:	Dan Shantz
Cash Equivalent Price:	\$1,020,000	Property Rights:	Fee simple estate
Terms:	\$200,000 down; \$994,375 Deed of Trust; 7% interest; 7 year amortization; annual payments of \$198,450 years 1-6 and \$72,715 year 7		
Parcel Size:	273.65	Ocean Frontage:	10,560 feet
Zoning:	Conservation	Use at Sale:	Rural residence
Access:	Boat, floatplane	Intended Use:	Settlement; speculation
Easements/Restrictions:	No commercial timber harvest	Highest & Best Use:	Recreation; speculation
<b>Property Description:</b> This 273.35-acre parcel consists of two contiguous Native allotments used as a residence. The land has about two miles of frontage on The Narrows near the east end of Raspberry Strait. Access is difficult at low tide levels because of shallow offshore water. Most of the shoreline has a low-bank profile, although direct access is possible near the east end of the property. Terrain has a modest to moderate slope with a mature growth of spruce vegetation. Reportedly, merchantable timberland occupies 150 acres. The residence and outbuildings that improve the land contribute an estimated \$30,000 in value.			
<b>Remarks:</b> The buyer (17 Russian families) acquired the property to develop a rural community. A deed restriction prohibits commercial timber harvest, but permits personal use. The purchase price was nearly double a market value appraisal prepared by BIA. The broker indicated the buyer was willing to pay a premium price because of the intended use and lack of available supply. Purchase price is adjusted to a cash equivalent value of \$1,050,000.			
<div style="text-align: right;">273.65 Acres = \$3 728/Acre</div>			



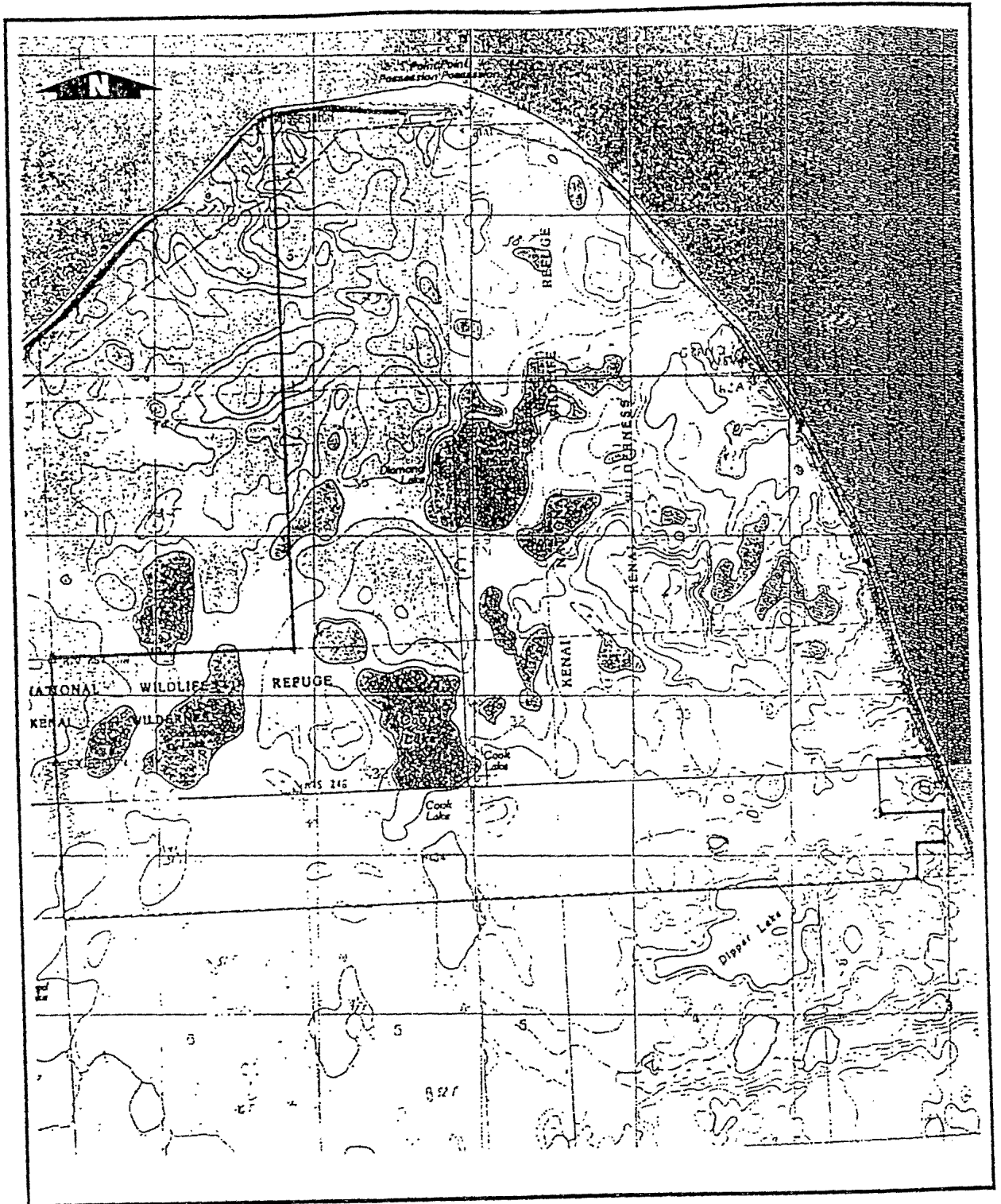
Comparable Land Sale No. 4

## Comparable Land Sale No. 4



<b>Location:</b>		South bank of the Alagnak River, approximately 23 miles southwest of Igiugig, Alaska	
<b>Legal Description:</b>		Lot 3, US Survey 8510, located in Section 36, T13S, R41W and Section 1, T14S, R41W, SM	
<b>Grantor:</b>	John C. Knutsen	<b>Instrument:</b>	Deed
<b>Grantee:</b>	Karl Leemann and Wanda Janina Barbara Leemann-Frank	<b>Book/Page:</b>	34/181
<b>Sale Date:</b>	4/00	<b>Data Source:</b>	John Knutsen; Deed
<b>Sale Price:</b>	\$300,000	<b>Confirmed By:</b>	Dan Shantz
<b>Cash Equivalent Price:</b>	\$300,000	<b>Property Rights:</b>	Fee simple estate
<b>Terms:</b>	Cash		
<b>Parcel Size:</b>	159.95 acres	<b>River Frontage:</b>	4,000 feet
<b>Zoning:</b>	None	<b>Use at Sale:</b>	Vacant
<b>Access:</b>	Boat, floatplane	<b>Intended Use:</b>	Recreation; speculation
<b>Easements/Restrictions:</b>	None	<b>Highest &amp; Best Use:</b>	Recreation, speculation
<b>Property Description:</b> This 160-acre Native allotment fronts the south bank of the Alagnak River some 20 miles east of the confluence with the Kvichak River on the Alaska Peninsula. The Alagnak River allows boat and floatplane access and braids in the river have created sandbars that permit small aircraft landings. A gentle slope and well-drained soils characterize a majority of the terrain, although low-lying pockets of wetlands are also present. Amenities include sport fishing and hunting that enhance commercial recreation use.			
<b>Remarks:</b> The seller described the land as an "excellent" lodge site, but he did not know what the buyer intended to do with the land.			
<b>Price Analysis</b>			
	\$300,000	÷	159.95 Acres = \$1,876/Acre



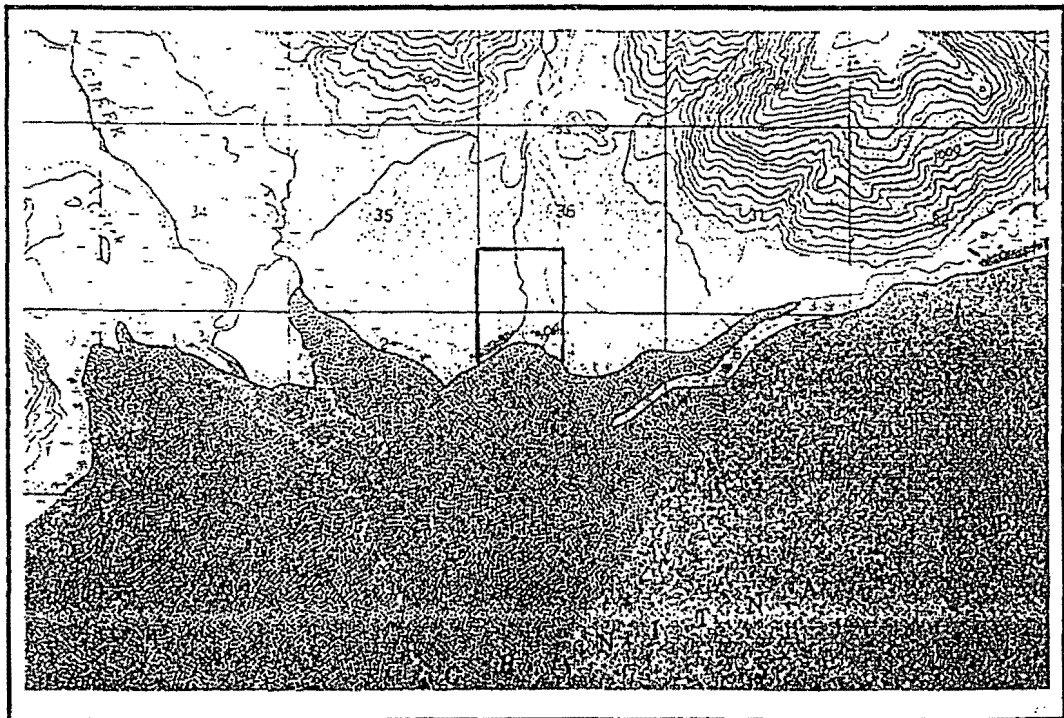
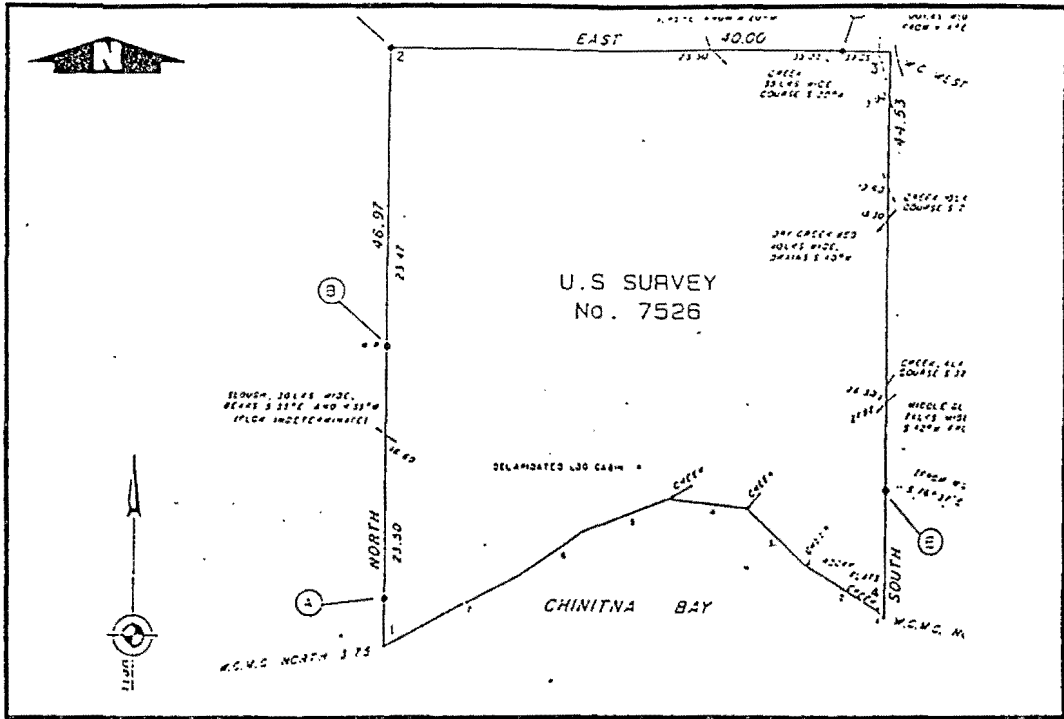


Comparable Land Sale No. 5

## Comparable Land Sale No. 5



<b>Location:</b>	Point Possession, north tip of Kenai Peninsula, approximately 15 miles southwest of Anchorage, Alaska		
<b>Legal Description:</b>	Patent No. 50-87-0228 (long legal retained on file)		
<b>Grantor:</b>	Point Possession, Inc.	<b>Instrument:</b>	Statutory Warranty Deed
<b>Grantee:</b>	Pathfinder Properties International, LLC	<b>Book/Page:</b>	530/860
<b>Sale Date:</b>	5/98	<b>Data Source:</b>	Elmer Cook (grantee)
<b>Sale Price:</b>	\$3,900,000	<b>Confirmed By:</b>	Dan Shantz
<b>Cash Equivalent Price:</b>	\$3,900,000	<b>Property Rights:</b>	Surface estate
<b>Terms:</b>	\$700,000 down; \$3,200,000 Deed of Trust; 8% interest; 10 year amortization; 2 annual payments of \$456,898; balance in 3 years		
<b>Parcel Size:</b>	4,481 acres	<b>Ocean Frontage:</b>	4 to 4.5 miles
<b>Zoning:</b>	Unzoned	<b>Use at Sale:</b>	Vacant
<b>Access:</b>	Boat, floatplane, or seasonal trail	<b>Intended Use:</b>	Commercial recreation
<b>Easements/Restrictions:</b>	30-foot right-of-way permit	<b>Highest &amp; Best Use:</b>	Recreation; speculation
<b>Property Description:</b>			
This 4,481-acre parcel occupies Point Possession at the north end of the Kenai Peninsula. Most of the shoreline has a steep bluff profile, although the north tip offers direct entry access. Terrain is gently rolling interspersed with numerous lakes that allows floatplane access. The parcel is an inholding of the Kenai National Wildlife Refuge. It is also within the Kenai Peninsula Borough and subject to real property taxation. The presence of a 30-foot Tesoro gas pipeline easement does not have an adverse affect on the parcel. The proximity of Anchorage enhances development potential.			
<b>Remarks:</b>			
The seller acquired the parcel as part of their ANCSA entitlements. Because the parcel is within refuge boundaries, it is subject to Section 22(g) of ANCSA. However, the buyer stated that this title encumbrance did not affect price negotiations. The buyer has not made the annual payment \$458,898 and foreclosure was set for mid-December.			

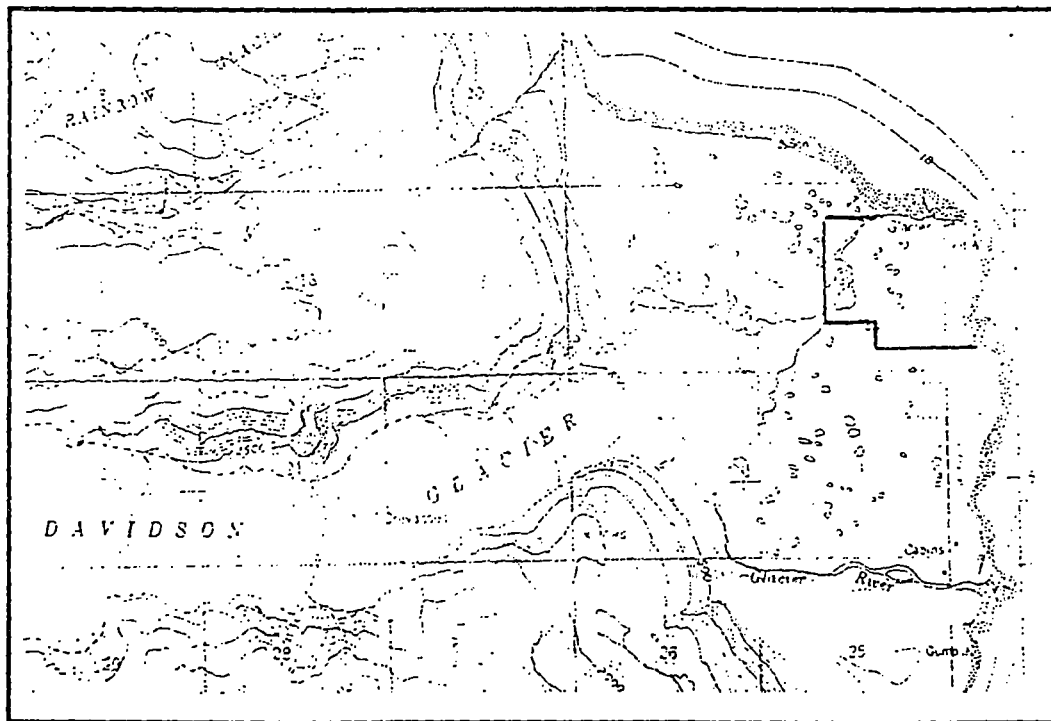
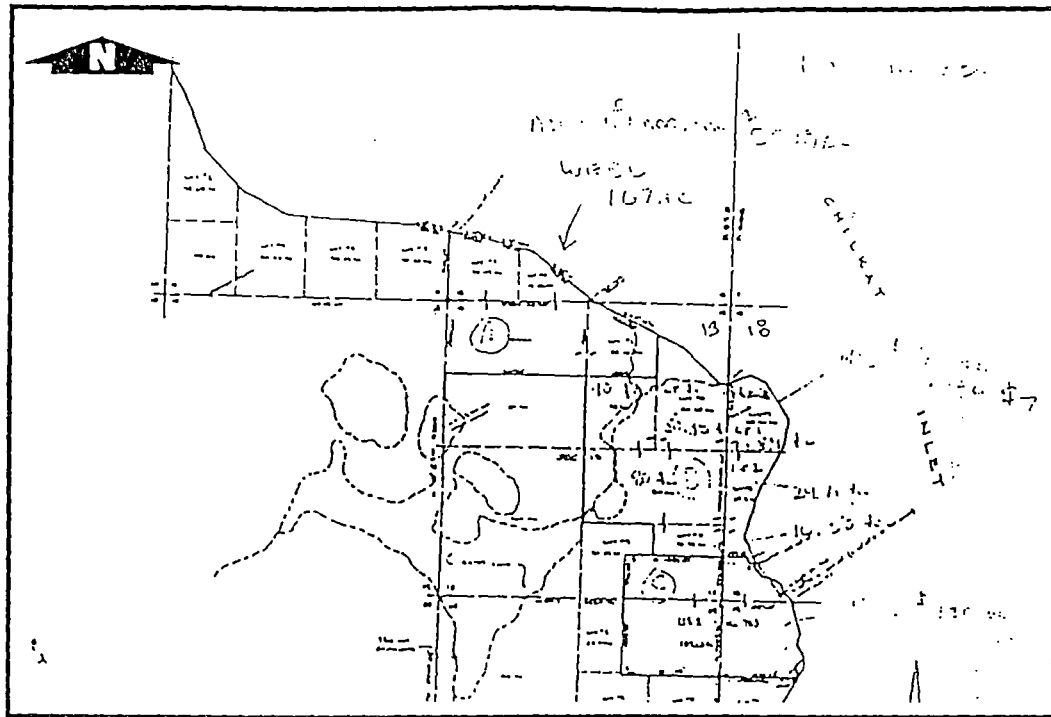


### Comparable Land Sale No. 6

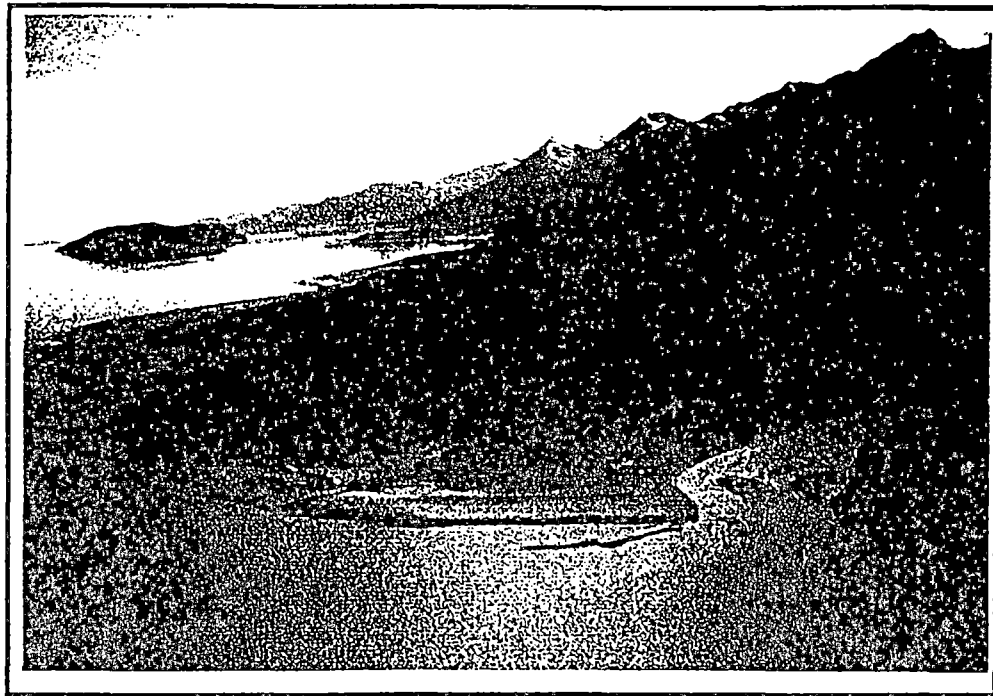
## Comparable Land Sale No. 6



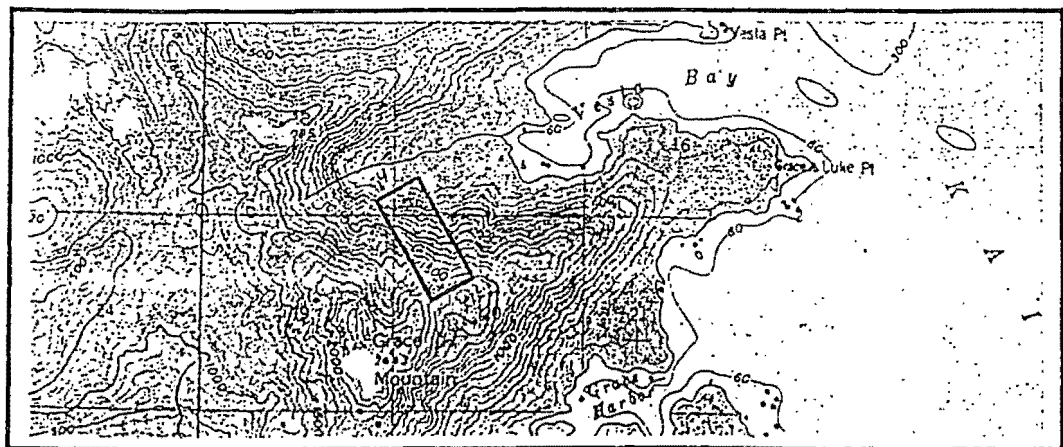
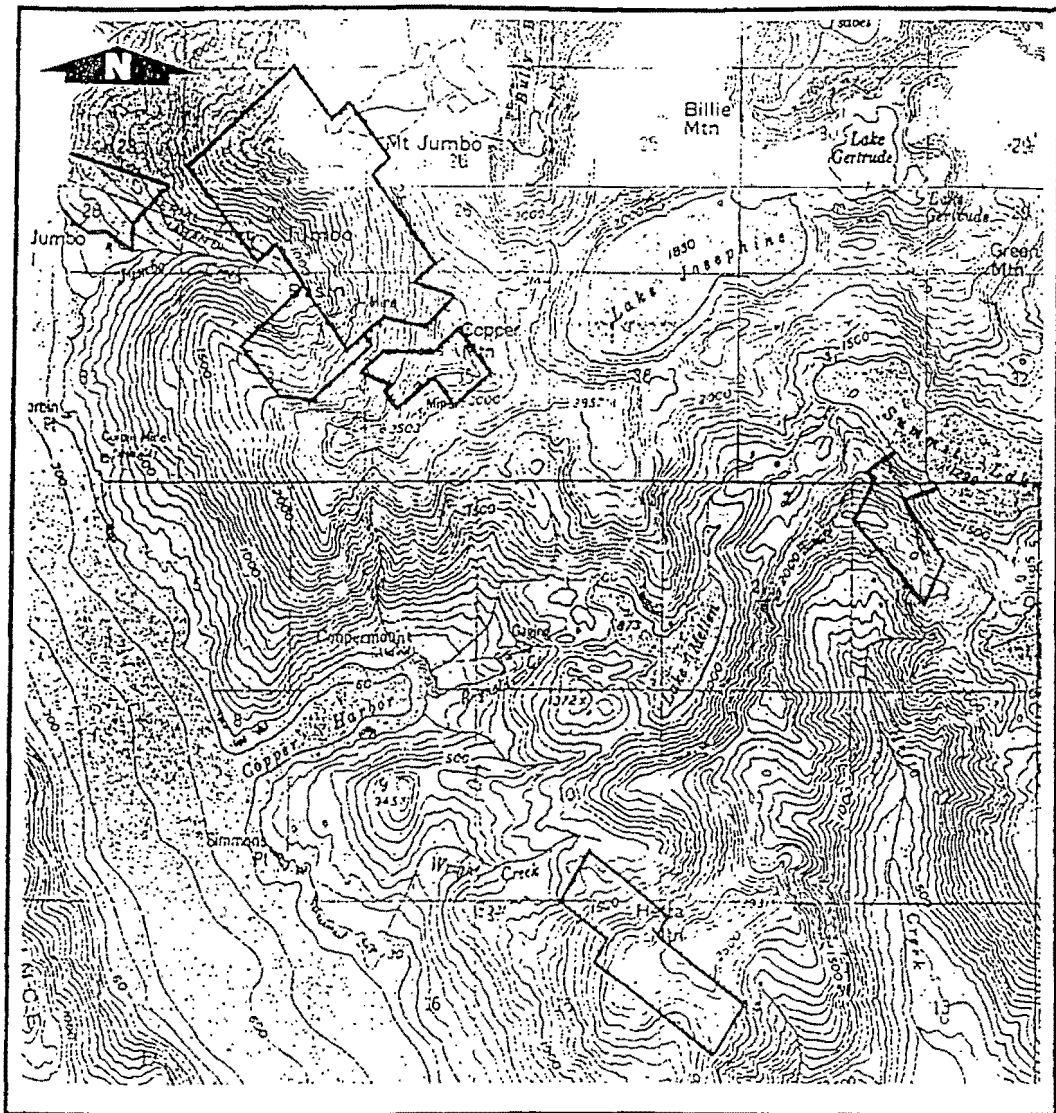
Location:		North shore of Chinitna Bay at the mouth of Middle Creek, west side of Cook Inlet, Alaska	
Legal Description:		US Survey 7526, located in Section 1, T4S, R23W and Section 36, T3S, R23W, SM	
Grantor:	James L. Lindgren	Instrument:	Deed
Grantee:	Richard Hojohn	Book/Page:	26/825
Sale Date:	10/97	Data Source:	Bernie Vockner (broker); Richard Hojohn; Deed
Sale Price:	\$220,000	Confirmed By:	Dan Shantz
Cash Equivalent Price:	\$220,000	Property Rights:	Surface estate
Terms:	Cash		
Parcel Size:	159.97	Ocean Frontage:	3,000 feet
Zoning:	Unzoned	Use at Sale:	Vacant
Access:	Boat, floatplane	Intended Use:	Private retreat
Easements/Restrictions:	None known	Highest & Best Use:	Recreation; speculation
<b>Property Description:</b> This 160-acre Native allotment fronts the north shore of Chinitna Bay within the wilderness boundaries of Lake Clark National Park. The property is also within the Kenai Peninsula and subject to real estate taxes. An extended tidal mud flat occurs at low tide intervals that restrict access. Upland terrain is generally level with vegetation consisting of spruce, shrubs, and grass. The physical character is suitable for recreation use.			
<b>Remarks:</b> The property was originally listed since 1992 with an asking price of \$1,600,000. The price was reduced to \$250,000 in 1996. The out-of-state buyer acquired the land as a private retreat.			
Price Analysis		\$220,000 ÷ 159.97 Acres	= \$1,375/Acre



### Comparable Land Sale No. 7

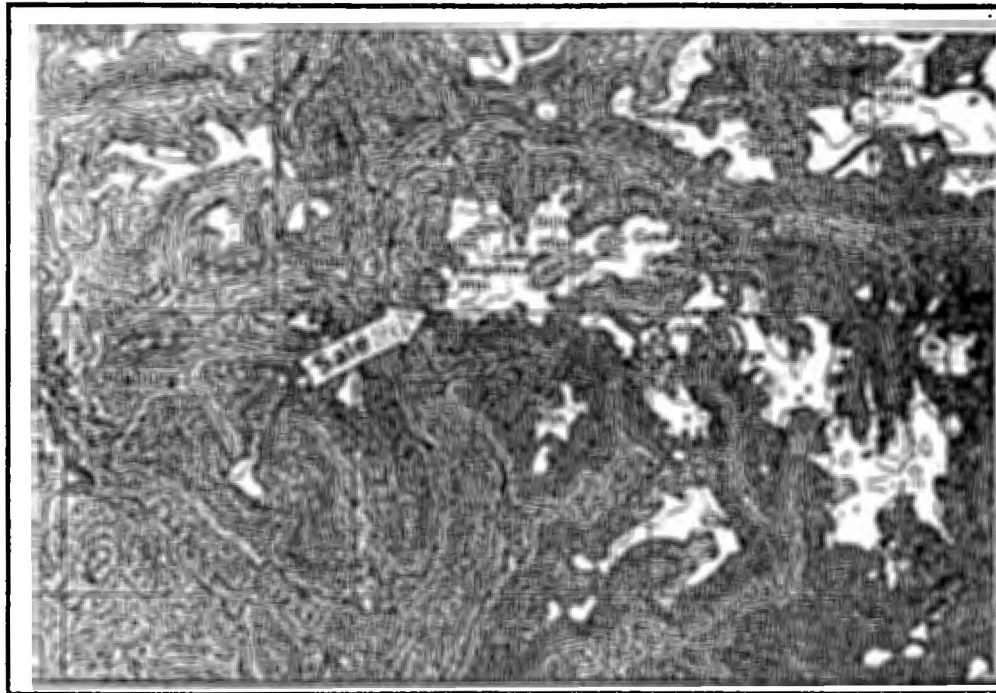
**Comparable Land Sale No. 7**


<b>Location:</b>	Glacier Point, west shore of Chilkat Inlet, approximately 10 miles south of Haines, Alaska		
<b>Legal Description:</b>	Lots 1 and 2, Section 18, T32S, R60E and Lots 2 and 3, Section 13, T32S, R59E, CRE		
<b>Grantor:</b>	Pauline Waunalee Turnmire	<b>Instrument:</b>	Statutory Warranty Deed
<b>Grantee:</b>	Bartlett R. Henderson, Jr.	<b>Book/Page:</b>	27/281
<b>Sale Date:</b>	11/95	<b>Data Source:</b>	Bart Henderson; Charles Horan
<b>Sale Price:</b>	\$190,000	<b>Confirmed By:</b>	Dan Shantz
<b>Cash Equivalent Price:</b>	\$190,000	<b>Property Rights:</b>	Fee simple estate
<b>Terms:</b>	\$50,000 down; \$140,000 Deed of Trust (terms not disclosed by buyer)		
<b>Parcel Size:</b>	240 acres	<b>Ocean Frontage:</b>	6,000 feet
<b>Zoning:</b>	None	<b>Use at Sale:</b>	Vacant
<b>Access:</b>	Boat, floatplane	<b>Intended Use:</b>	Recreation; speculation
<b>Easements/Restrictions:</b>	None	<b>Highest &amp; Best Use:</b>	Recreation, speculation
<b>Property Description:</b> This 240-acre parcel occupies Glacier Point and extends west toward the base of Davidson Glacier. The shoreline has a direct entry profile that permits boat or floatplane access. Terrain is generally level with near-shore vegetation consisting of grass and the interior a dense growth of spruce. A freshwater stream meanders across the west portion of the land. The physical character of the land is suitable for recreation use.			
<b>Remarks:</b> The buyer owns other remote land in the Haines market area. Buyer motivation is speculation.			
<b>Price Analysis</b>	\$190,000	÷	240 Acres = \$792/Acre



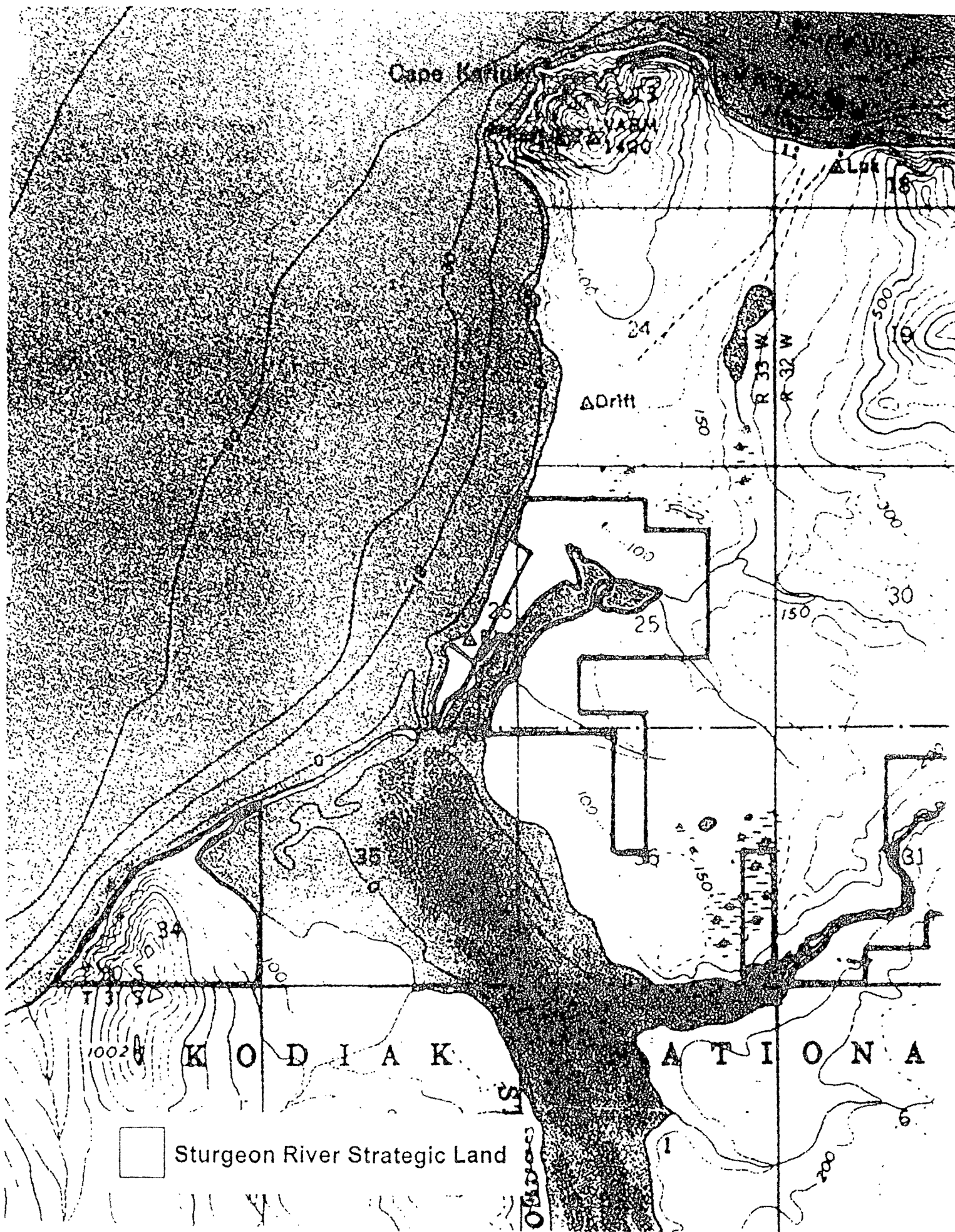


**Comparable Land Sale No. 8**

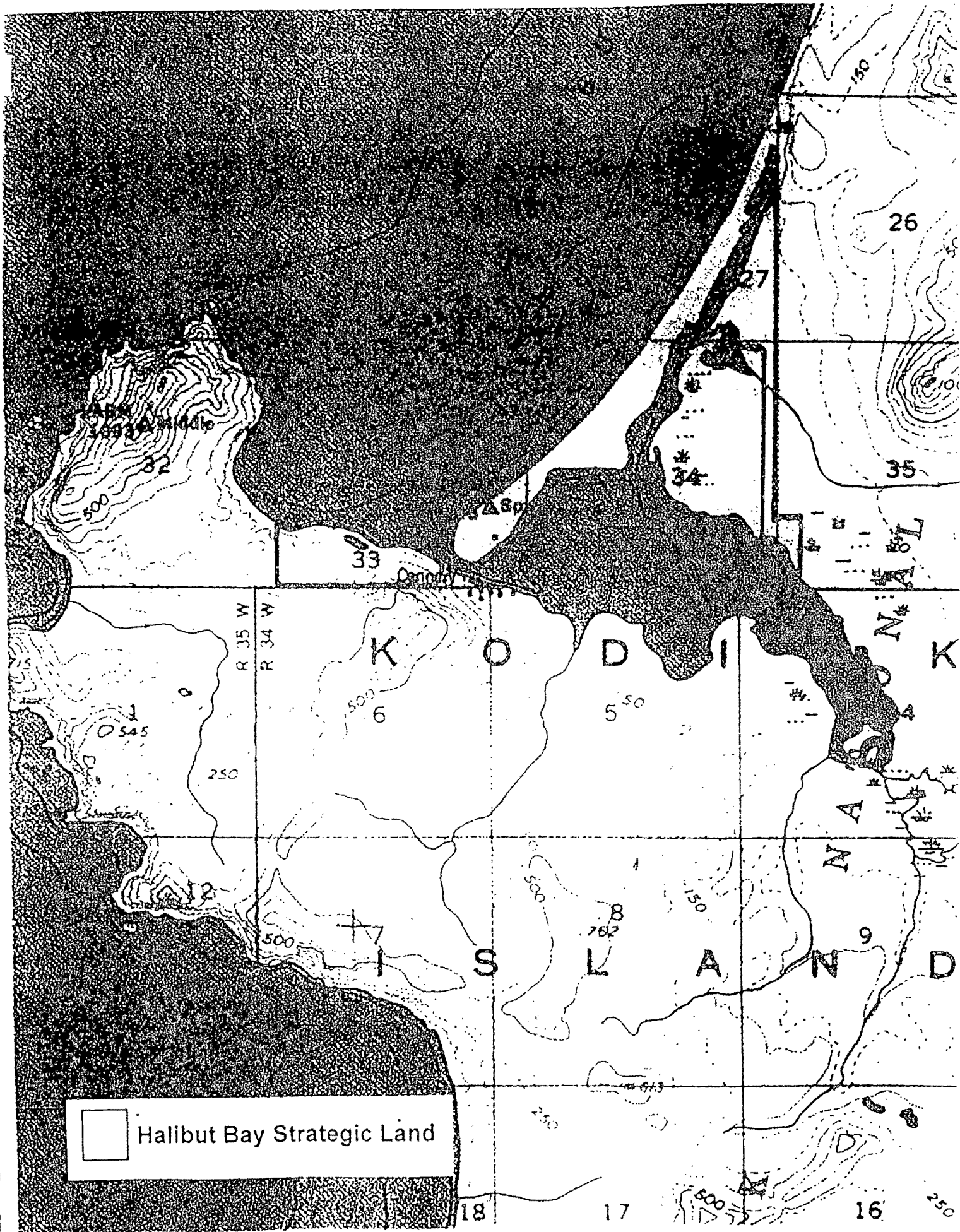


<b>Location:</b>		Prince of Wales Island, near Hetta Inlet, approximately 35 miles southwest of Ketchikan, Alaska	
<b>Legal Description:</b>		USMS 1542, 562A, 1545, 886, 1524, 1523A, 1522A, 648A, 884A	
<b>Grantor:</b>	Eskil Anderson, et al.	<b>Instrument:</b>	Statutory Warranty Deed
<b>Grantee:</b>	Sealaska Corporation	<b>Book/Page:</b>	242/918
<b>Sale Date:</b>	3/95	<b>Data Source:</b>	Rick Harris (grantee), Charles Horan
<b>Sale Price:</b>	\$920,000	<b>Confirmed By:</b>	Dan Shantz
<b>Cash Equivalent Price:</b>	\$920,000	<b>Property Rights:</b>	Fee simple estate
<b>Terms:</b>	Cash		
<b>Parcel Size:</b>	1,307 acres	<b>Ocean Frontage:</b>	1,111 feet
<b>Zoning:</b>	None	<b>Use at Sale:</b>	Vacant
<b>Access:</b>	Boat, floatplane, helicopter	<b>Intended Use:</b>	Speculation
<b>Easements/Restrictions:</b>	Section line easements	<b>Highest &amp; Best Use:</b>	Limited recreation; natural resources; speculation
<b>Property Description:</b> This 1,307-acre parcel consists of nine mineral surveys with six different locations on the south end of Prince of Wales Island in Southeast Alaska. Topography is predominately cutover drainage valleys and steep mountain slopes that rise to a maximum elevation of 5,000 feet. One survey has about 1,300 feet of frontage on a floatplane accessible lake and another has 1,100 feet of ocean frontage. In addition, the buyer allocated \$160,000 of stumpage value to one survey and stated subsurface entitlements contributed \$100,000 of value to the property.			
<b>Remarks:</b> The buyer stated a premium price was paid because they owned the adjacent land and desired continuity.			
<b>Price Analysis</b>			
	\$920,000	÷	1,307 Acres = \$704/Acre









## Summary Tables of Remote Land Acquisitions by EVOSTC, Government Agencies, and Special Interest Groups

*Table 4: Summary of EVOSTC Large Parcel Acquisitions*

Native Corporation	Location	Acres	Purchase Price	Price/Acre
Koniag, Inc.	West side of Kodiak Is.	59,674	\$28,500,000	\$478
Akhiok-Kaguyak	South end of Kodiak Is.	115,973	\$46,000,000	\$397
Old Harbor Native Corporation	Southeast end of Kodiak Is.	31,609	\$14,500,000	\$459
Chenega Corporation	Western PWS	59,520	\$34,000,000	\$571
Tatitlek Corporation	Eastern PWS	69,814	\$34,555,000	\$495
Eyak Corporation	Eastern PWS	75,425	\$45,000,000	\$597
English Bay Corporation	Kenai Fjords National Park	32,537	\$15,370,000	\$472

*Table 5: Summary of FWS Native Allotment Acquisitions*

Location	Date	Acres	Sale Price	Price/Acre
Halibut Bay, Lot 1, USS 10596	10/96	159.96	\$148,800	\$930
Halibut Bay, Lot 2, USS 10596	4/96	159.98	\$113,600	\$710
Halibut Bay, USS 9377	6/96	160	\$126,000	\$788
Halibut Bay, Lot 1, USS 9376	3/96	160	\$136,000	\$850
Halibut Bay, Lot 2, USS 9376	2/99	159.97	\$128,000	\$800
Grant Lagoon, USS 9453	3/96	134.98	\$121,500	\$900
Sturgeon River, Lot 3, USS 10570	10/99	149.99	\$150,000	\$1,000
Sturgeon River, Lot 3, USS 9386	12/99	159.99	\$160,000	\$800
Sturgeon River, Lot 5, USS 9386	12/99	109.99	\$88,000	\$800
Sturgeon River, Lot 4, USS 9386	1/00	49.96	\$55,000	\$1,100

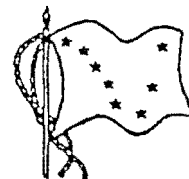
*Table 6: Summary of Large Parcel Acquisitions, Exchanges, & Leases*

<b>Parties Involved</b>	<b>Type</b>	<b>Name/Location</b>	<b>Acres</b>	<b>Price</b>	<b>Price/Acre</b>
Kijik/National Park Service	A	Tazimina Lake	9,173	\$3,715,065	\$405
Ahtna/Air Force	A	OTH Backscatter	5,408	\$2,470,000	\$457
Tetlin/Air Force	A	OTH Backscatter	2,901	\$1,380,000	\$476
Tanacross/Air Force	A	OTH Backscatter	2,935	\$1,550,000	\$528
Seldovia Native Assoc./DNR	E	Kachemak Bay	3,578	\$3,303,500	\$923
St. George & St. Paul/FWS	A	Pribilof Islands	8,224	\$5,200,000	\$632
NANA/National Park Service	E	Cape Krusenstern	65,000	\$3,900,000	\$60
ASRC/National Park Service	E	Gates of the Arctic	101,272	\$5,100,000	\$50
ASRC/BLM	E	Pinga Exchange	37,800	\$3,400,000	\$90
ASRC/National Park Service	E	Kurupa Lake	6,138	\$550,000	\$90
Fairbanks Gold Co./DNR	L	Fort Knox	7,505	\$1,276,000	\$170
The Conservation Fund/Isonotski	A	Izembek NWR	8,496	\$1,050,000	\$124

**LAND FIELD SERVICES, INC.**

P.O. BOX 221649  
ANCHORAGE, ALASKA 99522  
248-6740

P.O. BOX 72510  
FAIRBANKS, ALASKA 99707  
452-1206



July 20, 2000

**RECEIVED**

JUL 21 2000

Department of Law  
Office of Attorney General  
3rd Judicial District  
Anchorage, Alaska

State of Alaska  
Department of Law  
1031 West Fourth Avenue, Suite 200  
Anchorage, Alaska 99501

Attention: Mr. Alex M. Swiderski  
Assistant Attorney General  
Environmental Section

Subject: Karluk IRA Council Transaction  
Kodiak Island  
Transactions Descriptions

Alex:

Reference is made to the LFSI letter of June 29, 2000 concerning the captioned subject, specifically paragraph 4 on page 1 thereof.

After a meeting with the Cadastral people at the Bureau of Land Management, it is now my opinion that in Township 30 South, Range 33 West, Seward Meridian, the Lot 2 as described in the June 29, 2000 letter is in Section 35, not in Section 26.

Although the rectangular survey plat, prepared by the United States Department of the Interior, Bureau of Land Management, dated April 29, 1999 and officially filed May 17, 1999 for Township 30 South, Range 33 West, Seward Meridian, does not specify that Lot 2 of Section 35 is within the Kodiak National Wildlife Refuge, a review of Public Land Order 1634, dated May 9, 1958 and filed in the Federal Register on May 16, 1958, as amended by Section 303(5) of ANILCA, leads me to the opinion that the Kodiak Island Unit, as redesignated and expanded, of the Kodiak National Wildlife Refuge, does include Lot 2 of Section 35, Township 30 South, Range 33 West, Seward Meridian.

Very truly yours,

LAND FIELD SERVICES, INC.

  
P.J. Sullivan**RECEIVED**  
JUL 24 2000

PJS/ns



## LAND FIELD SERVICES, INC.

P.O. BOX 221649  
ANCHORAGE, ALASKA 99522  
248-6740

P.O. BOX 72510  
FAIRBANKS, ALASKA 99707  
452-1206



June 29, 2000

RECEIVED

JUL - 3 2000

Department of Law  
Office of Attorney General  
9th Judicial District  
Anchorage, Alaska

State of Alaska  
Department of Law  
1031 West Fourth Avenue, Suite 200  
Anchorage, Alaska 99501

Attention: Mr. Alex M. Swiderski  
Assistant Attorney General  
Environmental Section

Subject: Karluk IRA Council Transaction  
Kodiak Island  
Transaction Descriptions

Alex:

Reference is made to the LFSI letter of June 6, 2000 and our meeting of June 27, 2000 concerning the captioned subject.

Enclosed for your review and use, please find modified descriptions for the State of Alaska acquisitions and for the United States of America acquisitions in this transaction.

These descriptions have been modified in an effort to allow you to formulate the acreage differences between these descriptions and the 1,860 acre descriptions as described in the infamous Quitclaim Deed from Koniag, Inc. to Karluk IRA Council dated January 17, 1986 and recorded January 17, 1986 in Book 78, Pages 149-151, Kodiak Recording District.

In Township 30 South, Range 33 West, Seward Meridian, Lot 2 of Section 26 is added to the State of Alaska acquisitions, assuming that this lot is northerly of the north boundary of the Kodiak National Wildlife Refuge. If, in fact, this 0.70 acre lot is southerly from this boundary line, then this Lot 2 in Section 26 should be added to the Federal acquisition.

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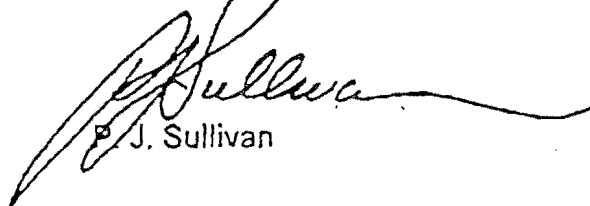
Alaska Department of Law  
June 29, 2000  
Page 2

In either case, these descriptions will allow you to obtain acreage descriptions so that the difference between the descriptions herein described and the 1,860 acres may be determined and afford you the opportunity to include more lands in the transaction.

If you have any questions concerning this letter, please do not hesitate to contact the undersigned.

Very truly yours,

LAND FIELD SERVICES, INC.



P. J. Sullivan

PJS/ns

Enclosures

cc: Mr. C. Walter Ebell



Karluk Transaction  
Legal Description of Lands  
State of Alaska Acquisitions

All of the following described lands within Township 30 South, Range 32 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted January 26, 2000 and filed February 11, 2000:

Section 13: That portion of Lot 1 which, if unsurveyed, would be described as those portions of  $S\frac{1}{2}N\frac{1}{2}SE\frac{1}{4}$ ;  $S\frac{1}{2}SE\frac{1}{4}$ ;  $SE\frac{1}{4}NE\frac{1}{4}SW\frac{1}{4}$ ;  $S\frac{1}{2}SW\frac{1}{4}$  lying northerly of the north bank of the Karluk River

Section 13: Lot 2

Section 14:  $S\frac{1}{2}SE\frac{1}{4}$  lying northerly of the north bank of the Karluk River

Section 22: Lot 1 and Lot 3

Section 22: That portion of Lot 2 which, if unsurveyed, would be described as those portions of  $NE\frac{1}{4}$ ;  $N\frac{1}{2}SE\frac{1}{4}$ ;  $N\frac{1}{2}SW\frac{1}{4}$ ;  $S\frac{1}{2}SW\frac{1}{4}$  lying southerly of the south bank of the Karluk River

Section 23: Lot 1

Section 23: That portion of Lot 2 which, if unsurveyed, would be described as those portions of  $N\frac{1}{2}NE\frac{1}{4}$ ;  $N\frac{1}{2}S\frac{1}{2}NE\frac{1}{4}$ ;  $NW\frac{1}{4}NE\frac{1}{4}SW\frac{1}{4}$ ;  $N\frac{1}{2}NW\frac{1}{4}SW\frac{1}{4}$ ;  $NW\frac{1}{4}$  lying southerly of the south bank of the Karluk River

Section 24:  $N\frac{1}{2}NW\frac{1}{4}$  lying southerly of the south bank of the Karluk River

All of the following described lands within Township 30 South, Range 33 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted April 29, 1999 and filed May 17, 1999:

Section 25: That portion of Lot 1 which, if unsurveyed, would be described as portions of  $SW\frac{1}{4}NE\frac{1}{4}$ ;  $NW\frac{1}{4}SE\frac{1}{4}$ ;  $N\frac{1}{2}SW\frac{1}{4}$ ;  $SW\frac{1}{4}SW\frac{1}{4}$ ;  $SE\frac{1}{4}NW\frac{1}{4}$ ;  $SW\frac{1}{4}NW\frac{1}{4}$ ;  $S\frac{1}{2}N\frac{1}{2}NW\frac{1}{4}$

Section 26: Lot 2

Section 26: Lot 3

Karluk Transaction  
Legal Description of Lands  
United States of America Acquisitions

All of the following described lands within Township 30 South, Range 32 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted January 26, 2000 and filed February 11, 2000:

Section 31: Lot 2

All of the following described lands within Township 30 South, Range 33 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted April 29, 1999 and filed May 17, 1999:

Section 25: Lot 2

Section 26: Lot 4

Section 34: All (fractional)

Section 35: Lot 1

Section 36: Lot 2

Lot 6, U.S. Survey 9386, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted October 29, 1992 and filed November 10, 1992

Lot 10, U.S. Survey 9386, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted July 14, 1999 and filed July 23, 1999

All of the following described lands within Township 31 South, Range 33 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted April 29, 1999 and filed May 17, 1999:

Section 19: Lot 2

Section 30: Lot 2 and Lot 3

Section 31: Lot 2

All of the following described lands within Township 32 South, Range 34 West, Seward Meridian, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted April 29, 1999 and filed May 17, 1999:

Section 27: Lot 2

Section 33: Lot 2

Section 34: Lot 1

Section 35: Lot 2

## Chapter 17.13

## C-CONSERVATION DISTRICT

## Sections:

- 17.13.010 Description and intent
- 17.13.020 Permitted principal uses and structures
- 17.13.030 Permitted accessory uses and structures
- 17.13.040 Conditional uses
- 17.13.050 Area requirements
- 17.13.060 Maximum lot coverage for structures
- 17.13.070 Building height limit
- 17.13.080 Setbacks from property lines
- 17.13.090 Special district regulations
- 17.13.100 Fences, parking and signs
- 17.13.110 Nonconformities

17.13.010 Description and intent. The Conservation (C) Zoning District is established for the purpose of maintaining open space areas while providing for single-family residential, and limited commercial land uses. For the conservation district, in promoting the general purposes of this title, the specific intentions of this chapter are:

A. To encourage the use of land for single-family residential and limited commercial purposes;

B. To encourage the continued use of land for open space areas; and

C. To encourage the discontinuance of existing uses that are not permitted under the provisions of this chapter. (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.020 Permitted principal uses and structures. The following land uses and activities are permitted in the conservation district:

A. All of the permitted principal uses and structures in the Natural Use (NU) Zoning District;

B. Agricultural activities and related structures, except commercial livestock grazing;

C. Commercial fishing activities and related structures, including mariculture activities and related structures;

D. Commercial guiding and/or outfitting activities (e.g. hunting, fishing, photography, etc.) and related structures (e.g. lodges) containing provisions for no more than six (6) clients;

E. Parks;

F. Recreational activities (including recreational mining activities);

G. Single-family dwellings/recreational cabins and associated home occupations; and

H. Timber harvesting activities and transportation and utility facilities constructed in support of permitted timber harvesting activities. (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 86-27-O §3, 1986; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.030 Permitted accessory uses and structures. In addition to those uses and structures specifically identified in section 17.13.020, the following accessory uses and structures are permitted when developed in support of permitted principal uses.

1. Docks, piers, water intake facilities, power structures, etc.
2. Accessory residential buildings (e.g., crew quarters in support of commercial set net fishing and lodge operations, banyas, outhouses, etc.).
3. Storage and warehouse structures (e.g., gear buildings, generator sheds, etc.).
4. Transportation and utility facilities (e.g., roads, pipelines, communication facilities, etc.) but not airstrips. (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.040 Conditional uses. The following land uses and activities may be allowed by obtaining a conditional use permit in accordance with the provisions of chapter 17.67:

1. All of the conditional uses in the NU-Natural Use Zoning District.
2. Airstrips.
3. Commercial livestock grazing.
4. Lodges that have provisions for more than six (6) clients.
5. Logging camps and timber harvesting support facilities (e.g. log transfer facilities), including timber products processing facilities.
6. Non-recreational mineral extraction activities and related structures.
7. Seafood processing facilities and related structures.
8. Transportation and utility facilities not otherwise permitted and not otherwise used in conjunction with permitted uses (e.g., roads, pipelines, communications facilities etc.). (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.050 Area requirements.

- A. Lot area. The minimum lot area required is five (5) acres.
- B. Lot width. The minimum lot width required is two hundred fifty (250) feet. (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.060 Maximum lot coverage for structures. The maximum lot coverage allowed by the total of all structures is five (5) percent of the lot area, except that on any lot of record, structures may cover two thousand (2000) square feet of the lot or five (5) percent of the lot area, whichever is greater. (Repealed and re-enacted by Ord. 93-66 §2, 1993; Ord. 84-57-O §1(part), 1984; Ord. 82-46-O §2(part), 1982).

17.13.070 Building height limit. The maximum building height allowed is thirty-five (35) feet for residential buildings and fifty feet (50) for accessory buildings. (Ord. 93-66 §2, 1993).

## 17.13.080 Setbacks from property lines.

## 1. Setbacks from property lines.

a. There is a required front yard setback of twenty-five (25) feet, except lots fronting on marine waters are exempt from any front yard setback.

b. There is a required side yard setback of twenty-five (25) feet.

c. There is a required rear yard setback of twenty-five (25) feet.

## 2. Setbacks from anadromous fish water bodies.

a. There is a required setback (preventing clearing, filling, excavation, or structural development) of fifty (50) feet from the bank vegetation of anadromous fish water bodies that are specified pursuant to AS 16.05.870(a) and 5 AAC 95.010, except in the case of timber harvesting activities, whose required setback will be regulated by AS 41.17.010-950, as amended, and the regulations enacted thereunder. This provision shall not prevent removal in the setback area associated with a habitable residential, or recreational structure of (1) up to fifty (50) percent of the trees and (2) other vegetation if a suitable ground cover (such as grass) is planted.

b. Water dependent facilities, in stream development activities, and fording may be located closer than fifty (50) feet, and in the water when permitted by the Alaska Department of Fish and Game under AS 16.05.870(b) and (d) and 5 AAC 95.700. Water dependent facilities are defined as uses, activities or structures which can be carried out only on, in or adjacent to water areas because the use, activity, or structure requires access to the water body (e.g. water intake facilities, micro hydro projects, docks, piers and boat watching facilities, etc.). (Ord. 93-66 §2, 1993).

## 17.13.090 Special district regulations.

1. Conditional uses in this zoning district are required to conform to the general district regulations unless the terms of the conditional use permit specify otherwise.

2. Approved conditional uses in this district shall conform to the following specific performance standards:

a. Conditional uses must minimize the impact on the natural environment and preserve, to the extent feasible and prudent, natural features. Specifically, to the extent feasible and prudent:

Conditional uses in upland habitats must retain natural vegetation coverage, natural drainage patterns, prevent excessive runoff and erosion, and maintain surface water quality and natural groundwater recharge areas; and

Conditional uses in estuaries, tideflats, and wetlands must maintain or assure water flow, natural circulation patterns, and adequate nutrient and oxygen levels.

Nothing in this provision shall require improvement to the natural condition existing prior to development.

b. Although a particular conditional use may constitute a minor change, the cumulative effect of numerous piecemeal changes can result in a major impairment of the environment. The particular site for which a conditional use application is made will be evaluated with the recognition that it may be part of a complete and interrelated environmental area. A conditional use shall be denied under this provision only if the weight of credible scientific evidence shows that the proposed conditional use together with all other then existing

conditional uses in the area will have a substantial adverse impact on the interrelated environmental area if such conditional uses are operating in accordance with all required state and federal rules and regulations. Consideration shall be given to the mitigating effect of not locating the conditional use in any other area and mitigation efforts, if any, which the proposed conditional user may offer for this or any other environmental areas. (Ord. 93-66 §2, 1993).

**17.13.100 Fences, parking, and signs.** Fences, parking areas, and signs are permitted and unregulated when they are related to the use of the property for a permitted and/or approved conditional use. (Ord. 93-66 §2, 1993).

**17.13.110 Nonconformities.**

1. On nonconforming lots of record any permitted principal uses and structures and any permitted accessory uses and structures are allowed.

2. On non-conforming lots of record the commission may grant a conditional use permit for any use listed in section 17.13.040.

3. Setbacks from property lines for nonconforming lots of one half (1/2) acre or less.

i. There is a required side yard and rear yard setback of ten (10) feet.

ii. There is a required front yard setback of fifteen (15) feet, except lots fronting on marine waters are exempt from any front yard setback.

4. Nonconforming uses will be regulated by the general nonconforming use provisions of this title.

5. Nonconforming structures will be regulated by the general nonconforming structures provisions of this title. (Ord. 93-66 §2, 1993).



## Alaska Department of Community and Economic Development

**Karluk*****Community Overview***

Current Population: 41 (1999 Alaska Dept. of Labor Estimate)  
Incorporation Type: Unincorporated  
Borough Located In: Kodiak Island Borough  
School District: Kodiak Island Borough Schools  
Regional Native Corporation: Koniag, Incorporated

**Location Description** -----

Karluk is located on the west coast of Kodiak Island, on the Karluk River, 88 air miles southwest of Kodiak and 301 miles southwest of Anchorage. It lies at approximately 57d 34m N Latitude, 154d 27m W Longitude (Sec. 17, T030S, R032W, Seward Meridian). The community is located in the Kodiak Recording District. The area encompasses 47 sq. miles of land and 21 sq. miles of water.

**History** -----

The mouth of the Karluk River is thought to have been populated by Natives for more than 7,000 years. 36 archaeological sites exist in the area. Russian hunters established a trading post here in 1786. At that time, the village was located on both sides of the Karluk River, in the area of Karluk Lagoon. Between 1790 and 1850, many tanneries, salteries and canneries were established in the area. By 1800, Karluk was known for having the largest cannery and the greatest salmon stream in the world. A post office was established in 1892. In the early 1900s, canneries were constructed by the Alaska Packers Association. Over-fishing of the area forced the canneries to close in the late 1930s. After a severe storm in January 1978, the village council decided to relocate the community to the present site, upstream on the south side of the lagoon. HUD constructed 23 houses at the new community location. The school was closed for the 1999-2000 year due to insufficient students. A few high school students attend Mount Edgecumbe in Sitka.

**Culture** -----

Karluk is an Alutiiq (Russian-Aleut) village with a fishing and subsistence lifestyle.

### Economy -----

Fish processing is the primary source of livelihood. The village corporation shares ownership of a cannery with the corporations of Larsen Bay and Old Harbor, but operations have remained idle in recent years. Residents actively participate in subsistence hunting and fishing activities. Salmon, trout, ducks, seals and deer are harvested.

### Facilities -----

The Indian Health Service constructed a piped water and community septic system in 1978. Water is supplied by a creek, is treated and stored in a 50,000-gallon tank. All occupied homes are fully plumbed. A feasibility study is needed to examine alternatives for water treatment, sewage disposal and solid waste. There is no refuse collection service, and the landfill is a temporary, unpermitted site. The school organizes aluminum recycling.

### Transportation -----

Karluk is accessible by air and water. Regular and charter flights depart from Kodiak. There is both a State-owned 2,000' gravel airstrip and a seaplane base at Karluk Lake. Barge service is available twice a month from Kodiak, and goods are lightered to shore by skiff. Funds have been requested to construct a dock.

### Climate -----

The climate of the Kodiak Islands is dominated by a strong marine influence. There is little or no freezing weather, moderate precipitation, and frequent cloud cover and fog. Severe storms and winds are common from December through February. Annual precipitation is 23 inches. Temperatures remain within a narrow range, from 31 to 54.

---

[Back to Detailed Information Query Page](#)

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Department of Community & Economic Development

Research & Analysis Section

Phone: 907-465-4750 Fax: (907) 465-5085

e-mail: [Michael\\_Cushing@dced.state.ak.us](mailto:Michael_Cushing@dced.state.ak.us)

## Alaska Department of Community and Economic Development

Alaska Community Database  
Detailed Query Results

## Larsen Bay

For Photos of Larsen Bay click [here](#)*Community Overview*

Current Population: 137 (certified December, 1999, by DCED)  
Incorporation Type: 2nd Class City  
Borough Located In: Kodiak Island Borough  
School District: Kodiak Island Borough Schools  
Regional Native Corporation: Koniag, Incorporated

## Location Description -----

Larsen Bay is located on Larsen Bay, on the northwest coast of Kodiak Island. It is 60 miles southwest of the City of Kodiak and 283 miles southwest of Anchorage. It lies at approximately 57d 32m N Latitude, 153d 58m W Longitude (Sec. 32, T030S, R029W, Seward Meridian). The community is located in the Kodiak Recording District. The area encompasses 5 sq. miles of land and 2 sq. miles of water.

## History -----

The area is thought to have been inhabited for at least 2,000 years. Hundreds of artifacts have been uncovered in the area. Russian fur traders frequented the Island in the mid-1700s. The bay was named for Peter Larsen, an Unga Island furrier, hunter and guide. In the early 1800s, there was a tannery in Uyak Bay. The present-day Natives are Alutiiq (Russian-Aleuts). Alaska Packers Association built a cannery in the village in 1911.

## Culture -----

Larsen Bay is a traditional Alutiiq settlement practicing a commercial fishing and subsistence lifestyle.

## Economy -----

The economy of Larsen Bay is primarily based on fishing and work at Kodiak Salmon Packers. 17 residents hold commercial fishing permits. There are very few year-round employment positions. A large majority of the population depends on subsistence activities. Salmon, halibut, seal, sea lion, clams, crab and deer are utilized.

#### Facilities -----

Water is supplied by an infiltration gallery on Humpy Creek, is treated and stored in a 50,000-gallon wood stave tank. An alternative supply line is connected to the penstock of the hydroelectric plant. All 40 homes are connected to the piped water system. A community septic tank with outfall line serves these homes, and the majority are fully plumbed. A new 200,000-gallon water storage tank is needed -- leakage is significant in the existing tank. Weekly refuse collection services are provided. The community uses an incinerator.

#### Transportation -----

Larsen Bay is accessible by air and by water. Regular and charter flights are available from Kodiak. There is a State-owned lighted 2,700' gravel airstrip and a seaplane base. Docking facilities are available. The Corps of Engineers began construction of a breakwater and boat harbor in the summer of 1997. A cargo barge arrives every six weeks from Seattle.

#### Climate -----

The climate of the Kodiak Islands is dominated by a strong marine influence. There is little or no freezing weather, moderate precipitation, and frequent cloud cover and fog. Severe storms are common from December through February. Annual precipitation is 23 inches. Temperatures remain within a narrow range, from 32 to 62.

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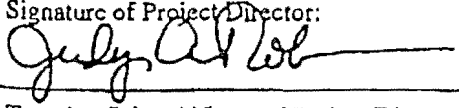
Department of Community & Economic Development

Research & Analysis Section

Phone: 907-465-4750 Fax: (907) 465-5085

e-mail: [Michael\\_Cushing@dced.state.ak.us](mailto:Michael_Cushing@dced.state.ak.us)

## STANDARD AGREEMENT FORM

1. Agency Contract Number: 2000-07	2. ASPS Number: 10-00-072	3. Financial Coding: 10040391	4. Agency Assigned Encumbrance Number
5. Vendor Number:		6. Alaska Business License Number: 402063	
This contract is between the State of Alaska,			
7. Department of Natural Resources		Division of Mining, Land, and Water hereafter the State, and	
8. Contractor: MacSwain Associates Contractor		hereafter the	
Mailing Address 4401 Business Park Blvd, Suite 22	City Anchorage	State AK	Zip +4 99503
<p>9. ARTICLE 1. Appendices: Appendices referred to in this contract and attached to it are considered part of it.</p> <p>ARTICLE 2. Performance of Service: Provide appraisal for Karluk/Sturgeon River parcels per RFP dated 4-19-2000.</p> <p>2.1 Appendix A (General Provisions). Articles 1 through 14, governs the performance of services under this contract.</p> <p>2.2 Appendix B sets forth the liability and insurance provisions of this contract.</p> <p>2.3 Appendix C sets forth the services to be performed by the contractor.</p> <p>ARTICLE 3. Period of Performance: The period of performance for this contract begins <u>May 1, 2000</u> and ends <u>August 2, 2000</u>.</p> <p>ARTICLE 4. Considerations:</p> <p>4.1 In full consideration of the contractor's performance under this contract, the State shall pay the contractor a sum not to exceed \$ <u>19,750</u> in accordance with the provisions of Appendix D.</p> <p>4.2 When billing the State, the contractor shall refer to the Authority Number or the Agency Contract Number and send the billing to:</p>			
10. Department of Natural Resources		Attention: Division of Mining, Land, and Water	
Mailing Address: 550 W. 7 <sup>th</sup> Ave, Suite 650, Anchorage, AK 99501-3576		Attention: Judy A. Robinson, SRWA, Appraisal Unit	
CONTRACTOR		13. CERTIFICATION: I certify that the facts herein and on supporting documents are correct, that this voucher constitutes a legal charge against funds and appropriations cited, that sufficient funds are encumbered to pay this obligation, or that there is a sufficient balance in the appropriation cited to cover this obligation. I am aware that to knowingly make or allow false entries or alterations on a public record, or knowingly destroy, mutilate, suppress, conceal, remove or otherwise impair the variety, legibility or availability of a public record constitutes tampering with public records punishable under AS 11.56.315-.320. Other disciplinary action may be taken up to and including dismissal.	
Name of Firm MacSwain Associates			
Signature of Authorized Representative		Date:	
Typed or Printed Name of Authorized Representative Steve MacSwain, MAJ			
Title: President	Employer ID No.(EIN) or SSN: 92-0135517		
CONTRACTING AGENCY		Signature of Head of Contracting Agency or designee:	
Department/Division: Natural Resources/Mining, Land, and Water		Date: May 1, 2000	
Signature of Project Director: 		Typed or Printed Name: Christopher M. Rutz, CPM	
Typed or Printed Name of Project Director: Judy A. Robinson, SRWA		Title: Procurement Officer	
Title: Review Appraiser			

NOTICE: This contract has no effect until signed by the head of contracting agency or designee.

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**Appraiser Qualifications - Steve MacSwain**

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<b>Appraiser</b>	Steve MacSwain, MAI	
	Member of Appraisal Institute - No. 5700 State of Alaska, Certified General Real Estate Appraiser - No. 42	
	Real estate appraiser and consultant of all property types throughout Alaska. Appraisal and consulting services have been performed for a variety of purposes including financing, leasing, insurance, condemnation, taxation, buy-sell decisions and property damages. Considerable appraisal experience in analyzing and valuing remote land and environmentally impaired properties. Special consulting expertise in litigation support. Professional experience totals 30 years.	
<b>Professional Experience</b>	1986 to Present	MacSwain Associates-Owner
	1975 - 1986	Appraisal Company of Alaska-President
	1970 - 1975	Real Estate Services Corporation-Appraiser
	1969 - 1970	State of Alaska Department of Highways-Right-of-Way Agent
<b>Education</b>	Bachelor of Business Administration (1969), University of Alaska, Fairbanks	
<b>Appraisal Education<sup>1</sup></b>	1999 - Valuation of Contaminated Properties by International Right of Way Association	
	1999 - Eminent Domain and Condemnation Appraising by the Appraisal Institute	
	1999 - Valuation of Detrimental Conditions in Real Estate by the Appraisal Institute	

---

<sup>1</sup> Partial listing only. Numerous other seminars and classes taken that evaluate property interests and analyze the cost, market, and income approaches to value.

1999 - Special-Purpose Properties by the Appraisal Institute

1997 - External Influences on Real Estate Value by the Appraisal Institute

1997 - Public Interest Value: The Debate by the Appraisal Institute

1996 - Standards of Professional Practice by the Appraisal Institute

1996 - Dynamics of Office Building Valuation by the Appraisal Institute

1996 - Appraisal of Retail Properties by the Appraisal Institute

1995 - Appraisal Practices for Litigation by the Appraisal Institute

1995 - The Appraiser as Expert Witness by the Appraisal Institute

1994 - Environmental Awareness by the International Right of Way Association

1994 - Skills of Expert Testimony by the International Right of Way Association

1992 - Understanding Environmental Contamination in Real Estate by the International Right of Way Association

1991 - Appraisal Institute Symposium on Valuation of Contaminated Properties

1989 - Condemnation and Mineral Appraisal Seminar by the American Institute of Real Estate Appraisers

**Community Service**

Past member of Board of Equalization, Municipality of Anchorage

**Professional  
Organizations**

Current Member of National Experience Review Committee of the Appraisal Institute

Current Member of the Regional Ethics and Counseling Panel of the Appraisal Institute

Current Member of the International Right of Way Association, Sourdough Chapter 49

Past president of Alaska Chapter 57 of the Appraisal Institute

**Major Assignments**

Principal real estate consultant and expert witness for all lands affected by the *Exxon Valdez* oil spill. Project involved over 2,000,000 acres of remote land and nearly 2,000 private property owners.

Appointed as the south-central representative of a three-member panel that analyzed and valued over 1,000,000 acres and 8,000 parcels for the Mental Health Lands Settlement.

Contract assessor for the North Slope Borough, Kodiak Island Borough, City of Nome, and the City of Valdez.

Represented Seibu Alaska, Inc. in their property tax appeal of Alyeska Resort with the Municipality of Anchorage that resulted in a \$65 million reduction in assessed value.

Appraised over 100,000 acres in the Gates of Arctic National Park and Preserve and testified as an expert witness.

**Expert Witness  
Experience**

Steve MacSwain is qualified as an expert witness in both the United States Federal Court and the State of Alaska Superior Court. He has testified as an expert witness in state and federal courts approximately 20 times over the past 30 years. In addition, he has testified as expert witness in numerous Alaskan municipal tax courts, public hearings, and depositions on matters related to real property.

**Master's Experience**

Appointed as a Master by the Superior Court of Alaska and Municipality of Anchorage to serve as an arbitrator in determining just compensation.



**Appraiser Qualifications – Dan Shantz**

---

**Appraiser**

Dan Shantz

State of Alaska, Certified General Real Estate Appraiser - No. 47

Real estate appraiser and consultant of all property types throughout Alaska and the western United States. Appraisals have been performed for financing, leasing, insurance, taxation, investment analysis, and property damage purposes. Special consulting expertise in evaluation of large parcels of remote land, resource management, feasibility analysis, and litigation support. Professional experience totals 19 years.

**Professional Experience**

1990 to Present

MacSwain Associates-Appraiser

1983 - 1990

Appraisal Company of Alaska-Appraiser

1986 - 1989

Yerkes and Associates-Appraiser

1981 - 1983

Municipality of Anchorage-Appraiser

**Education**

Bachelor of Arts, Economics (1974), University of Washington

**Appraisal Education<sup>2</sup>**

1999 - Appraisal of Nonconforming Uses by the Appraisal Institute

1999 - Valuation of Detrimental Conditions in Real Estate by the Appraisal Institute

1999 - Eminent Domain and Condemnation Appraising by the Appraisal Institute

1998 - Standards of Professional Appraisal Practice, Part C by the Appraisal Institute

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<sup>2</sup> Partial listing only, which is continued on the following page. Numerous other seminars and classes taken that evaluate property interests and analyze the cost, market, and income approaches to value.

## MacSwain Associates

1996 - Dynamics of Office Building Valuation by the Appraisal Institute

1996 - Appraisal of Retail Properties by the Appraisal Institute

1995 - Appraisal Practices for Litigation by the Appraisal Institute

1995 - The Appraiser as Expert Witness by the Appraisal Institute

1993 - Standards of Professional Appraisal Practice, Parts A and B by the Appraisal Institute

1992 - Highest and Best Use Analysis by the Appraisal Institute

1986 - Capitalization Theory and Techniques, Part B by the American Institute of Real Estate Appraisers

1986 - Capitalization Theory and Techniques, Part A by the American Institute of Real Estate Appraisers

1984 - Leasehold Valuation Seminar by the American Institute of Real Estate Appraisers

1984 - Basic Valuation Procedures by the American Institute of Real Estate Appraisers

### Professional Memberships and Affiliations

Associate Member, Appraisal Institute

State of Alaska Certified Real Estate Appraiser: General Real Estate Appraiser No. AA 47

### Appraisal Projects of Significance

Represented Seibu Alaska, Inc. in their property tax appeal with the Municipality of Anchorage that resulted in a \$65 million reduction in assessed value.

Senior real estate consultant and factual witness for all lands affected by the *Exxon Valdez* oil spill. Project involved over 2,000,000 acres of remote land and nearly 2,000 private property owners.

Appraised 160,000 acres and 47 small parcels of privately owned land located in the Kodiak National Wildlife Refuge.

Appraised all 14(c)3 land entitlement for Sitnasauk Native Corporation located within or near Nome, Alaska.

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Nick Sugak

Nick Sugak 3-22-01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Tim Shugak

Tim Shugak 3/21/01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Peter Shugak

Peter Shugak

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 27 2001

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

MARIE BENSON     Marie Benson

3-22-d

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 22 2001

Ms McCammon,

EXXON VALDEZ OIL SPILL  
TRUSTEE COUNCIL

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Signed,  
Thelma May Hamilton

  
March 20, 2001

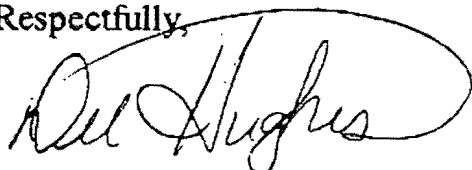
March 26, 2001

Molly McCammon, Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G. Street Suite #401  
Anchorage, Alaska 99501  
Fax 907 276-7178

Ms. McCammon,

I am a member of the Village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1860 acres of land. It is my wish that you listen to the enrolled members of the Village of Karluk, and do not participate in any negotiations concerning our land.

Respectfully,

A handwritten signature in cursive script, appearing to read "Dee Hughes", enclosed within a large, loopy oval flourish.

Dee Hughes, Village of Karluk Member



RECEIVED

MAR 23 2001

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Philip B. McCormick

Philip B. McCormick 3-21-~~00~~01

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

RECEIVED

MAR 23 2001

EXXON VALDEZ OIL  
SPILL TRUSTEE COUNCIL

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Chuck Reft

Chuck Reft 3-21-01

RECEIVED

MAR 23 2001

Ms Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council

Ms McCammon,

I am a member of the village of Karluk and do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.

Barbara Reft

Barbara Reft 3-21-01

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

JORI Lynn Benton  
( Print Name )

Jori Lynn Benton  
( Sign Name )

03-23-01  
( Date )

*I am not willing to Sell or lease -  
Thank you!!*

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Nick N. Chauliaga  
(Print Name)

Nick N. Chauliaga  
(Sign Name)

3-24-2001  
(Date)

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

CONSTANCE E. Chya  
(Print Name)

Constance E. Chya  
(Sign Name)

03-24-01  
(Date)

The 1860 acres belong to the  
Karluk membership - (186 original  
members.)

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Paul Wayne Chya JR.  
(Print Name)

Paul Wayne Chya JR.      03-23-01  
(Sign Name)                      (Date)

The LANDS Belong TO The KARLUK membership  
Residing in and outside of KARLUK. THANKS.

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk; I want to have it on record that I do not want EVOS or anyone else to purchase, permanently acquire, or lease our 1860 acres of land on and around Karluk, Sturgeon River, Grants Lagoon, and Halibut Bay areas.**

Robin E. Chya  
( Print Name )

Robin E. Chya  
( Sign Name )

03-23-01  
( Date )

The 1860 acres Belong TO us All. Do NOT Sell.



**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Michelle Ann Holmes  
( Print Name )

Michelle Ann Holmes  
( Sign Name )

03-24-01  
( Date )

*This decision is up to the full membership - not a ~~few~~ <sup>few!!</sup>*

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645 G Street, Suite 401  
Anchorage, Alaska 99501**

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SHANNON R KNOWLES  
( Print Name )

Shannon R Knowles  
( Sign Name )

3-26-01  
( Date )

Molly McCammon  
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Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

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HAZEL ANN MAULTEN  
(Print Name)

Hazel Ann Maulten  
(Sign Name)

3-24-01  
(Date)

I cannot understand why I am not counted  
in Karluk - I being born & raised there -  
feel very put out - finding out I could not  
register in Karluk.  
I believe that those Chukchee's (village)  
should be checked into and come to a decision on  
getting us all enrolled to our birth right that  
we have K... Perhaps a work area as the IPR says.  
Hazel Maulten

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**

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Helen Malutin  
( Print Name )

Helen Malutin  
( Sign Name )

3-24-01  
( Date )

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

**Ma. McCammon,**

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Alexander Panamoff  
(Print Name)

Alexander Panamoff  
(Sign Name)

3-21-01  
(Date)

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Alex Panomartoff Jr  
( Print Name )

Alex Panomartoff Jr  
( Sign Name )

03-26-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that**  
**I do not want EVOS or anyone else to purchase or permanently acquire** <sup>or</sup>  
**our 1,860 acres of land.** <sub>lease</sub>

Arthur PANAMAROFF  
Print Name

Arthur Panamaroff  
Sign Name

3-24-2001  
Date

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

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FRIEDA I. PANAMAROFF  
Print Name

Frieda I. Panamaroff  
Sign Name

3-24-2001  
Date



**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

**Fax: (907) 276-7178**

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Mable J. PAVAMAROFF  
( Print Name )

Mable J. Pavamaroff      3-26-01  
( Sign Name )                      ( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

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**our 1,860 acres of land.** <sub>lease</sub>

Sharon Marie Panameroff Hochmuth  
Print Name

Sharon Panameroff Hochmuth  
Sign Name

3-24-01  
Date

03/27/2001 10:40 307 488-2403 PAGE 21  
Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501

Fax: (907) 276-7178

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Sandra L. VINBERG  
( Print Name )

Sandra L. Vinberg 3-24-01  
( Sign Name ) ( Date)

I am not a willing seller of  
my 10 acres of land in Karluk. ✓

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.**

Edna M Vinberg  
Print Name

Edna M Vinberg  
Sign Name

3/15/01  
Date

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
**645 G Street, Suite 401**  
**Anchorage, Alaska 99501**  
**Fax: (907) 276-7178**

**Ms. McCammon,**

**I am a member of the village of Karluk. I want to have it on record that I do not want EVOS or anyone else to purchase or permanently acquire our 1,860 acres of land.**

Donald Jay Viaberg  
Print Name

D. J. Viaberg  
Sign Name

3-26-01  
Date

**Molly McCammon  
Executive Director  
Exxon Valdez Oil Spill Trustee Council  
645 G Street, Suite 401  
Anchorage, Alaska 99501**

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Theodore Squartsoff  
( Print Name )

Theodore Squartsoff  
( Sign Name )

3-26-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
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Mary Ann Holmes  
( Print Name )

Mary Ann Holmes  
( Sign Name )

3-27-01  
( Date )

**Molly McCammon**  
**Executive Director**  
**Exxon Valdez Oil Spill Trustee Council**  
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Darryl Squartsoff  
(Print Name)

Darryl Squartsoff  
(Sign Name)

3-24-01  
(Date)



**Molly McCammon  
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Exxon Valdez Oil Spill Trustee Council  
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ELI SQUARTSOFF  
(Print Name)

Eli Squartsoff  
(Sign Name)

03/26/01  
(Date)

GEM

# Exxon Valdez Oil Spill Trustee Council

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



## MEMORANDUM

**TO:** Trustee Council  
**FROM:** Molly McMahon  
**DATE:** March 26, 2001  
**RE:** NRC Review of April 2000 GEM document

---

The February 2001 Interim Report contains many substantive recommendations concerning the draft GEM Program. These recommendations can be divided into four broad categories:

- Revisions of the GEM mission and goals
- Revisions to the scientific conceptual foundation
- Narrowing the focus of the monitoring and research plan
- Addressing broader issues such as organizational and administrative structure, data management and community involvement

The following is a summary of key recommendations and some comments in response.

1. Considering the mission statement and goals:
  - The mission statement has several potential problems: Can the objective of sustaining a healthy, diverse ecosystem be met by understanding how natural and human influences affect the ecosystem's productivity? Will research efforts be able to distinguish natural from human influences? What is the definition of a healthy ecosystem, especially as it relates to ecosystem structure or functioning, or both? Is equal weight given to natural and human changes in the program? What happens when the purpose of sustaining ecosystem health runs counter to the purpose of sustaining human use of marine resources?
  - It is unrealistic to believe the program can address all five stated goals equally. Should focus the program on the goals most related to long-term monitoring: detection of change and understanding the causes of change. The other three goals will follow as outcomes. The goal of solving problems for resource managers and regulators should not drive the conceptual foundation of the program.

*Follow-up: I would like to hear from the Trustee Council and the Public Advisory Group on these issues. My initial recommendation would be to keep the mission statement as is, but revise the goals to the two primary goals of detection of change and understanding the causes of change. The other three goals can be described as outcomes.*

2. Suggested revisions to the scientific conceptual foundation:

- A broad conceptual foundation with a sound, ecosystem-based scientific basis is important. It needs to provide both intellectual stability and flexibility. It should be built around a simple but clear ecosystem model.
- The conceptual foundation should be developed without preconceived notions of what species or processes are important to monitor, as those specifics will evolve out of this underlying framework.
- It should include natural and human-induced changes and accommodate changing needs without compromising the core long-term measurements.
- The conceptual foundation must incorporate concerns of local communities and be compatible with the fundamental mission of GEM.

*Follow-up: These issues were identified earlier and have been incorporated into a revised conceptual foundation that will be discussed at the meeting.*

3. Narrowing the focus of the monitoring and research plan:

- The GEM program should articulate two or three fundamental questions about the ecosystem that then are used to guide the selection for monitoring of particular species and other physical, biological, and human aspects of the ecosystem. Hypothesis-driven choices will help ensure that the most critical determinants of ecosystem functions will be monitored.
- Measurements should focus on elements of the conceptual foundation: food web, habitats, and abiotic factors (oceanography and climate) and should include clearly defined measures of human-induced changes.
- It is important to identify species that may be important in shaping food webs and the fisheries dependent upon them.
- Although it is properly intended to be a long-term program, GEM should include some short-term projects with clear management implications.
- Although the total domain of GEM is large, the core long-term monitoring program should focus on tractable areas where critical environmental data are needed. The primary geographic focus for monitoring should begin with Prince William Sound.
- GEM should plan a series of small, focused workshops that will provide detailed guidance needed to implement the science plan.

*Follow-up: Possible questions, hypotheses and broad monitoring components are being drafted and reviewed. They will be discussed at the meeting. Certainly, the prior work done by the EVOS program in Prince William Sound will form the basis of future work. However, we now know that the productivity of the sound and the northern Gulf are driven by influences elsewhere in the gulf, and these can't be ignored. It will be important to focus on where we can get the most value from our monitoring efforts. Additionally, throughout our public planning process, a commitment has been made to have broad geographic coverage throughout the entire spill-impacted area. Even though this will be a challenge to ensure that measurements lead to meaningful information, we believe that not only is it doable, but it is also essential.*

4. Other, broader issues that need to be addressed:

- GEM's organizational structure should be enhanced with layers of both staff and stakeholder input and incorporate mechanisms for independent program planning, proposal review, and community involvement.
- The role of Trustee Council staff in the program plan should be considered, whether it is based on a science funding agency model or a foundation model, or some hybrid.
- GEM needs a major administrative commitment to data management, including mechanisms and procedures to ensure data quality and good archiving over time and to make data available to the public and to researchers.
- For the GEM program to be durable over time, the organizational structure should incorporate meaningful involvement of local communities. This involvement should occur at all stages, from planning and development to oversight and review.

*Follow-up: These are definitely issues that need to be addressed, but are not necessary for the immediate development of the draft GEM Monitoring and Research Plan. They will be addressed over the summer.*

**The Gulf Ecosystem Monitoring Program:  
First Steps Toward A  
Long-term Research and Monitoring Plan**

**INTERIM REPORT**

**February 2001**

**Committee to Review the Gulf of Alaska Ecosystem Monitoring Program  
Polar Research Board  
Board on Environmental Studies and Toxicology  
The National Research Council**

**NATIONAL ACADEMY PRESS  
Washington, D.C.**

**NATIONAL ACADEMY PRESS    2101 Constitution Avenue, N.W.    Washington, D.C. 20418**

NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee responsible for the report were chosen for their special competencies and with regard for appropriate balance.

This study was supported by Contract/Grant No. CMRC/WASC/NOAA 50ABNF-0-00013 (BAA00360) between the National Academy of Sciences and Exxon Valdez Oil Spill Trustee Council. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the organizations or agencies that provided support for the project.

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The **National Academy of Engineering** was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

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The **National Research Council** was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. William A. Wulf are chairman and vice chairman, respectively, of the National Research Council.



## **Committee to Review the Gulf of Alaska Ecosystem Monitoring Program**

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**DON BOWEN**, Fisheries and Oceans Canada, Nova Scotia  
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**DAVID POLICANSKY**, Associate Director, Board on Environmental Studies and Toxicology  
**ANN CARLISLE**, Senior Project Assistant  
**ROB GREENWAY**, Project Assistant<sup>1</sup>

---

<sup>1</sup> Until November 2000.

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**ROGENE HENDERSON**, Lovelace Respiratory Research Institute, Albuquerque, New Mexico  
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**WILLEM F. PASSCHIER**, Health Council of the Netherlands, The Hague  
**ANN POWERS**, Pace University School of Law, White Plains, New York  
**KIRK SMITH**, University of California, Berkeley, California  
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### *Senior Staff*

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**RAYMOND A. WASSEL**, Senior Program Director for Environmental Sciences and Engineering  
**KULBIR BAKSHI**, Program Director for the Committee on Toxicology  
**ROBERTA M. WEDGE**, Program Director for Risk Analysis  
**K. JOHN HOLMES**, Senior Staff Officer

## Acknowledgments

This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the NRC's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their review of this report:

Joanna Burger, Rutgers, The State University of New Jersey  
Eileen Hofman, Old Dominion University, Virginia  
Ed Houde, University of Maryland, Chesapeake Biological Laboratory  
Mahlon C. Kennicutt, Texas A&M University  
Terrie Klinger, University of Washington  
Bruce Menge, Oregon State University  
Jim Schumacher, Consultant, New Mexico  
Judith Vergun, Oregon State University

Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the report before its release. The review of this report was overseen by Robert Paine, University of Washington. Appointed by the National Research Council, he was responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.

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## Executive Summary

After the *Exxon Valdez* oil spill (EVOS) in 1989, a civil settlement required Exxon Corporation to pay \$900 million over 10 years to restore resources injured by the spill and compensate for reduced or lost services the resources provide. A trustee council of three federal and three state members was established to administer the funds. As part of its mission, the EVOS Trustee Council has disbursed research funds, first for damage assessment and then for monitoring and research. It also set aside some of the funds to create a permanent trust to support continued, long-term research and monitoring in the region. At this point, the *Exxon Valdez* Oil Spill Trustee Council is developing a plan to guide this new research program, to be known as the Gulf Ecosystem Monitoring (GEM) program.

To ensure that the GEM program is based on a science plan that is robust, far-reaching, and scientifically sound, the Trustee Council asked the National Academies to serve as an independent advisor. The Academies appointed a special committee and charged it to review the scope and content of the program as it evolves. This interim report focuses on the conceptual foundation of the GEM science program, as presented in the document *Gulf Ecosystem Monitoring: A Sentinel Monitoring Program for the Conservation of the Natural Resources of the Northern Gulf of Alaska*, Review Draft April 21, 2000 (sometimes called GEM 2000 and cited in this report as EVOSTC, 2000a; the Executive Summary of this document is reproduced in Appendix B). The committee will prepare a separate report reviewing the more detailed research and monitoring science plan when that document becomes available in mid-2001.

## MISSION

The EVOSTC showed great foresight in setting aside funds over the years to create the trust fund that will now provide long-term funding to the GEM program, and the initial descriptions of the intent and scope of the program are to be commended. As envisioned, the GEM program will offer an unparalleled opportunity to increase understanding of how large marine ecosystems in general, and Prince William Sound in particular, function and change over time. The committee believes that it stands to be a significant program of importance to Alaska, the nation, and the scientific community. With our underlying support for GEM stated, the committee would like to point out areas where we believe the program could be improved. We do not wish to be taken as overly critical; we remind readers that the committee was charged to provide advice and we offer our thoughts as constructive additions to the planning debate. This report follows the general structure used in EVOSTC 2000a, beginning with discussion of the mission statement.

GEM's mission, as stated in EVOSTC, 2000a, is broad and ambitious: "to sustain a healthy and biologically diverse marine ecosystem in the northern Gulf of Alaska and the human use of the marine resources in that ecosystem through greater understanding of how its productivity is influenced by natural changes and human activities." The purpose of any mission statement is to serve as a general guiding principle and statement of underlying philosophy and

approach, and this mission statement accomplishes this purpose. However, putting this statement into practice is likely to prove difficult.

First, it is not clear that the objective of sustaining a healthy, diverse ecosystem can be met by understanding how natural and human influences affect the ecosystem's productivity. In fact, it is not even clear whether research efforts will be able to distinguish natural from human influences. Furthermore, the term *healthy ecosystem* itself has no clear definition, in part because there are no generally accepted, clearly defined measures for assessing ecosystem health (NRC, 2000). Still, the committee recognizes that GEM must work under the mission assigned to it and thus move past this definition problem. It might be useful for GEM to develop a practical, working definition of ecosystem health that relates to a particular aspect or aspects of the Gulf of Alaska's ecosystem structure (the biotic community), or functioning (ecological processes such as productivity), or both. Having a working definition of ecosystem health would allow GEM to use its funds more effectively and avoid the risk of trying to monitor and study more than the program can successfully handle.

Although the mission statement gives equal weight to natural and human changes, the GEM program document (EVOSTC, 2000a) is primarily focused on large-scale climate changes, particularly the Pacific Decadal Oscillation. Despite some language about the importance of human activities (such as fishing, tourism, and other human uses), there is little in the proposed research program that actually explores those activities. As the research program becomes operational, the complexities and ambiguities presented by the mission statement will become more apparent and problematic.

According to an early EVOSTC document, Restoration Update Winter 2000 (EVOSTC, 2000b) (see Appendix A), GEM was conceived to have three main components:

1. long-term ecosystem monitoring (decades in duration);
2. short-term focused research (one to several years in length); and
3. ongoing community involvement, including use of traditional knowledge and local stewardship.

The committee views these three components as a sound foundation upon which to build. We recognize that this particular publication is a newsletter written for a general audience but believe the explanatory text does a good job of summarizing the original intent of the program.

## GOALS

The GEM program document outlines five program goals: detect, understand, predict, inform, and solve. While the general intent of these goals is understandable, in terms of guiding the design of the program, the committee sees them as extremely diverse and far-reaching. This may be a problem caused by writing the goals with the primary purpose of informing the public rather than for steering the science program. While the GEM mission provides a good general statement of intent, it is unrealistic to believe that the program can address all five stated goals equally. Certainly, some effort can go toward each of the goals, but the program should focus on the goals most related to long-term monitoring: detection of change and understanding the causes of change. Together, these will facilitate progress in learning to predict future changes, although the Trustee Council should be cautious about having too high expectations of predictability from such a program. The goal of informing the public can be built around this core structure. The goal of solving problems for resource managers and regulators also can be addressed in parallel to some extent, but should not drive the conceptual foundation of the program.

The committee's concern is that addressing all five goals will present the risk that the research and monitoring program will be spread too thin to be effective. In this report, the committee suggests some approaches to focusing the program goals, emphasizing the importance

of having a sound, underlying scientific foundation to guide the program over its intended long time horizon.

## **THE IMPORTANCE OF A SOUND CONCEPTUAL FOUNDATION**

The GEM program offers an unparalleled opportunity to increase understanding of how large marine ecosystems in general, and Prince William Sound in particular, function. To fulfill its promise, the program needs a sound scientific conceptual foundation. This basic conceptual underpinning is key because it will guide program planners to develop a core set of measurements that can be taken indefinitely. The conceptual foundation needs to provide both intellectual stability, to help keep the program focused and effective, and also flexibility so the program can evolve as knowledge grows and needs change.

The committee recommends that the conceptual foundation for GEM be built around a simple but clear ecosystem model such as the example shown in Chapter 2, Figure 2-1. The foundation should be developed without preconceived notions of what species or processes are important to monitor, as those specifics will evolve out of this underlying framework. In other words, program planners should look at the important elements depicted in the chosen model and ask: "what variables or questions need to be measured or asked to understand this element and its relationship to the others?"

The GEM program to date seems to be unwise in using the still-untested Pacific Decadal Oscillation (PDO) as its conceptual foundation. (However, it is expected that the GEM program will ultimately generate data that will help researchers evaluate the PDO hypothesis.) Other conceptual models, such as the inshore/offshore production model, are also too narrow to provide the right kind of conceptual foundation, although such models will provide useful input to GEM. Similarly, assuming that top predators serve to integrate environmental factors or drive the ecosystem is an assumption still to be tested, and again is not a sound conceptual foundation. The choice of conceptual foundation is, of course, critical, as this will drive the choice of species and parameters to monitor, as described in Chapter 2, Box 2-1.

A broad conceptual foundation with a sound scientific basis will provide a strong scientific justification for the program and will help to defend the program from criticism and political pressures over time. It will also provide an intellectual structure that guides modification of the program, if and when that becomes necessary. One might ask if this approach is too academic for a program that includes practical, management goals, and whether it would preclude the study of issues identified by managers or the public. The opposite is true. If the GEM program has a broad scientific foundation, then short-term issues of public concern can be addressed as elements within this broad construct. Even more important, a sound scientific framework would make it much more likely that the GEM program will collect the most useful and important ecological information. However urgent an environmental issue might be, understanding and managing it almost always depends on scientific understanding. Thus, a soundly designed program based on a scientific conceptual foundation should not be seen as an alternative to reflecting public interests and concerns. Instead, it should be recognized as the only way to do that effectively and over the long term. The committee offers the following recommendations to achieve this broad goal:

- The GEM program cannot address all its five stated goals equally. The program's main focus should be on the goals most related to long-term monitoring: detecting and understanding the causes of changes.
- The science plan should be strongly based on a broad conceptual foundation that is ecosystem-based. It should include natural and human-induced changes and it



should be flexible and able to accommodate changing needs without compromising the core long-term measurements.

- The GEM program should articulate two or three fundamental questions about the ecosystem that then are used to guide the selection for monitoring of particular species and other physical, biological, and human aspects of the ecosystem.
- Although it is properly intended to be a long-term program, GEM should include some short-term projects with clear management implications.
- GEM's organizational structure should be enhanced to incorporate mechanisms for independent program planning, proposal review, and community involvement.
- For the GEM program to be durable over time, the organizational structure should incorporate meaningful involvement of local communities. This involvement should occur at all stages, from planning and development to oversight and review.
- Although the total domain of GEM is large, the core long-term monitoring program should focus on tractable areas where critical environmental data are needed. The primary geographic focus for monitoring should begin with Prince William Sound.
- GEM should plan a series of small, focused workshops that will provide detailed guidance needed to implement the science plan.
- GEM needs a major administrative commitment to data management, including mechanisms and procedures to ensure data quality and good archiving over time and to make data available to the public and to researchers.

## Introduction

In 1989, the T/V *Exxon Valdez* spilled 11 million gallons of crude oil into Prince William Sound in Alaska, setting off a cascade of effects that still have repercussions more than a decade later (Figure 1-1). One result of the spill was that in 1991, the U.S. District Court approved a civil settlement that required Exxon Corporation to pay the United States and the State of Alaska \$900 million over 10 years to restore the resources injured by the spill and compensate for the reduced or lost services (human uses) the resources provided. Under the court-approved terms of the settlement, a Trustee Council of three federal and three state members was formed to administer these funds. The mission of the *Exxon Valdez* Oil Spill Trustee Council has been to return the environment to a "healthy, productive, world-renowned ecosystem" by restoring, replacing, enhancing, or acquiring the equivalent of natural resources injured by the spill and the services provided by those resources.

As part of its mission, the *Exxon Valdez* Oil Spill Trustee Council (EVOSTC) has disbursed research funds for almost 10 years, at first for damage assessment activities and then for monitoring and research to better understand the ecosystem and to understand impacts of the oil spill on identified important "resource clusters," or communities/resources (e.g., salmon, herring, marine mammals, subsistence resources). Extensive research has been conducted over the decade, making this the most studied cold water marine oil spill in history. At the same time, a portion of each payment has been set aside to create a permanent trust fund for future activities, and it is the use of this trust fund that is now being planned.

In keeping with its mandate and after extensive public input, the Trustee Council decided to use the trust fund to support continued research and monitoring in the region into the future. As conceived, this program—the Gulf Ecosystem Monitoring (GEM) program—has a unique opportunity to monitor the system in depth and over time in ways that bring both practical management lessons and deeper understanding of the causes and effects of ecosystem change.

### THE COMMITTEE'S CHARGE

To ensure that its plan for long-term research and monitoring in the Gulf of Alaska Ecosystem is the best possible, the Trustee Council asked the National Academies for assistance and a specially appointed committee was formed to review the scope, content, and structure of the draft Science Program and draft Research and Monitoring Plan (Box 1-1). The committee agreed to prepare this interim report commenting on the adequacy of the conceptual foundation of the GEM Program (as described in the document *Gulf Ecosystem Monitoring: A Sentinel Monitoring Program for the Conservation of the Natural Resources of the Northern Gulf of Alaska*, Review Draft, April 21, 2000, cited in this report as EVOSTC, 2000a). Later, the committee will prepare a final report reviewing the Research and Monitoring Science Plan, when it becomes available in mid-2001.

This interim report is divided into sections that roughly parallel the structure of the Trustee Council's 2000a document, first covering the GEM program mission and goals, then the structure and approach, and finally the scientific framework in some detail. The report includes insights drawn from other long-term science plans regarding issues such as governance structures and data management. Finally, the committee summarizes its conclusions about the conceptual foundation of the GEM program and provides recommendations to help guide development of the Research and Monitoring Science Plan.

**BOX 1-1**  
**THE COMMITTEE'S CHARGE**

The Committee to Review the Gulf of Alaska Ecosystem Monitoring Program is charged to provide independent scientific guidance to the *Exxon Valdez* Oil Spill Trustee Council, research community, and public as the Trustee Council develops a comprehensive plan for a long-term, interdisciplinary research and monitoring program in the northern Gulf of Alaska. Specifically, the committee will:

- Gain, through briefings and literature review, familiarity with the relevant body of scientific knowledge, including but not limited to that developed by the research and monitoring activities sponsored by the Trustee Council in the past.
- Convene one or more information-gathering meetings in Alaska where researchers, the public, and other interested people can convey their perspectives on what the research and monitoring plan should accomplish.
- Review the general strategy proposed in the draft Science Program (which includes information on the social and political context, mission, approach, and scientific background) and make suggestions for improvement.
- Review -- once it is available -- the draft Research and Monitoring Plan, including the scope, structure, and quality of the approach proposed for a long-term research and monitoring program in the northern Gulf of Alaska. This will include whether the conceptual foundation provides an adequate basis for long-term research and monitoring, and whether the research and monitoring plan adequately addresses gaps in the knowledge base and existing uncertainties. The committee will also address broader issues related to overall effectiveness of the Trustee Council's program and plan for guiding continued efforts to understand biological change in the Gulf of Alaska.

## PLANNING THE GEM PROGRAM: ESTABLISHING THE UNDERLYING FOUNDATION

The GEM program offers an unparalleled opportunity to increase our understanding of how large marine ecosystems (in general) and Prince William Sound (in particular) function. No other research and monitoring plan has a century-long time horizon. This kind of long-time-series measurement is a crucial tool for understanding ecosystem function. Thus, along with this opportunity comes an obligation to craft a research and monitoring plan that can withstand the test of time. This requires a core set of measurements that can be taken consistently and indefinitely, as well as flexibility to alter both conceptual understanding and research interests.

The first step for this or any research and monitoring plan is development of a conceptual foundation. This foundation needs to be broad, precisely because of the long time scale of GEM. No one can know what theories, taxa, or processes will emerge as critical to the public or managers, or relevant to ecosystem functioning, in future decades. The choice of conceptual foundation is, of course, critical, as this will drive the choice of species and parameters to monitor. Conceptual foundations that rest on a few indicator species, specific hypotheses about marine ecosystems (e.g., Pacific Decadal Oscillation), or current human impacts (e.g., fishing) are likely to be too narrow and inflexible to support the GEM mission (Box 2-1). Instead, the GEM conceptual foundation needs to incorporate the sense that marine ecosystems (processes and taxa) change in response to physical and biological changes and human impacts, as is clearly expressed within the GEM mission statement. Figure 2-1 presents one example of the kind of conceptual model that might be valuable to the program planners. Even if the same endpoints for monitoring could be reached by choosing variables to measure in the absence of a broad conceptual foundation (NRC 1995), it would be difficult to justify them without a conceptual foundation that provides the broad context and helps illustrate relationships.

A solid conceptual foundation will also buffer GEM against inevitable shifts in public concerns, such as current concerns with Steller sea lions. Indeed, GEM is clearly aware of the difficulty of pursuing long-term monitoring in the face of short-term interests. There are provisions for multi-decade measurements and for shorter research programs targeting specific issues or hypotheses, so that GEM can respond to current concerns without sacrificing long-term data sets that will prove increasingly useful as they accumulate. A well designed and broadly based program will provide the best possible scientific basis for dealing with short-term ecological issues of public concern. Indeed, a strongly designed program will provide a sound basis for additional attention to be paid to matters of urgency or immediate public concern, even if they are not central to the program itself. However, GEM will have to be carefully constructed to avoid being excessively distracted by real or perceived ecological crises.

GEM as conceived is meant to be a long-term monitoring program, and long time series are essential to detecting change on intermediate and long time scales. However, it is absolutely vital to recognize that long-term monitoring *per se* will not necessarily lead to a better scientific

understanding of the ecosystem. The value and utility of monitoring critically depends on the variables measured, the spatial and temporal extent of sampling, the spatial and temporal intensity of sampling, and the methods employed. Without clear vision at the outset, it is very difficult to establish monitoring programs that will provide useful data for a range of post-hoc tests. This is why the monitoring program must have a strong conceptual foundation and be hypothesis-driven.

Rendering the conceptual foundation into specific research activities implies the generation of questions. These questions can come from members of the scientific community. They can also come from members of the local native communities, fishing communities, state and federal resource managers, and any of the wide range of stakeholders of interest. The benefits of incorporating local communities in a meaningful fashion are twofold: local knowledge and participation can enrich the scientific program and, reciprocally, provide a broader basis of support and understanding for the central mission of the program. Indeed, while it is appropriate and probably necessary that a scientific conceptual foundation be developed primarily by scientists, the ability of local communities to inform and provide knowledge of the ecosystem must be emphasized.

Finally, the conceptual foundation must be compatible with the fundamental mission of GEM. This mission, as stated in the program, is broad and somewhat indefinite. Despite its breadth, however, the mission does focus attention on the reciprocal interactions between humans and the marine environment: humans derive goods, services, and pleasure from the ocean, and marine systems are in turn affected by human activities. All of this occurs within a context of regional climatic and oceanic change, changes that will inevitably (but perhaps unpredictably) occur during the time scale of GEM.

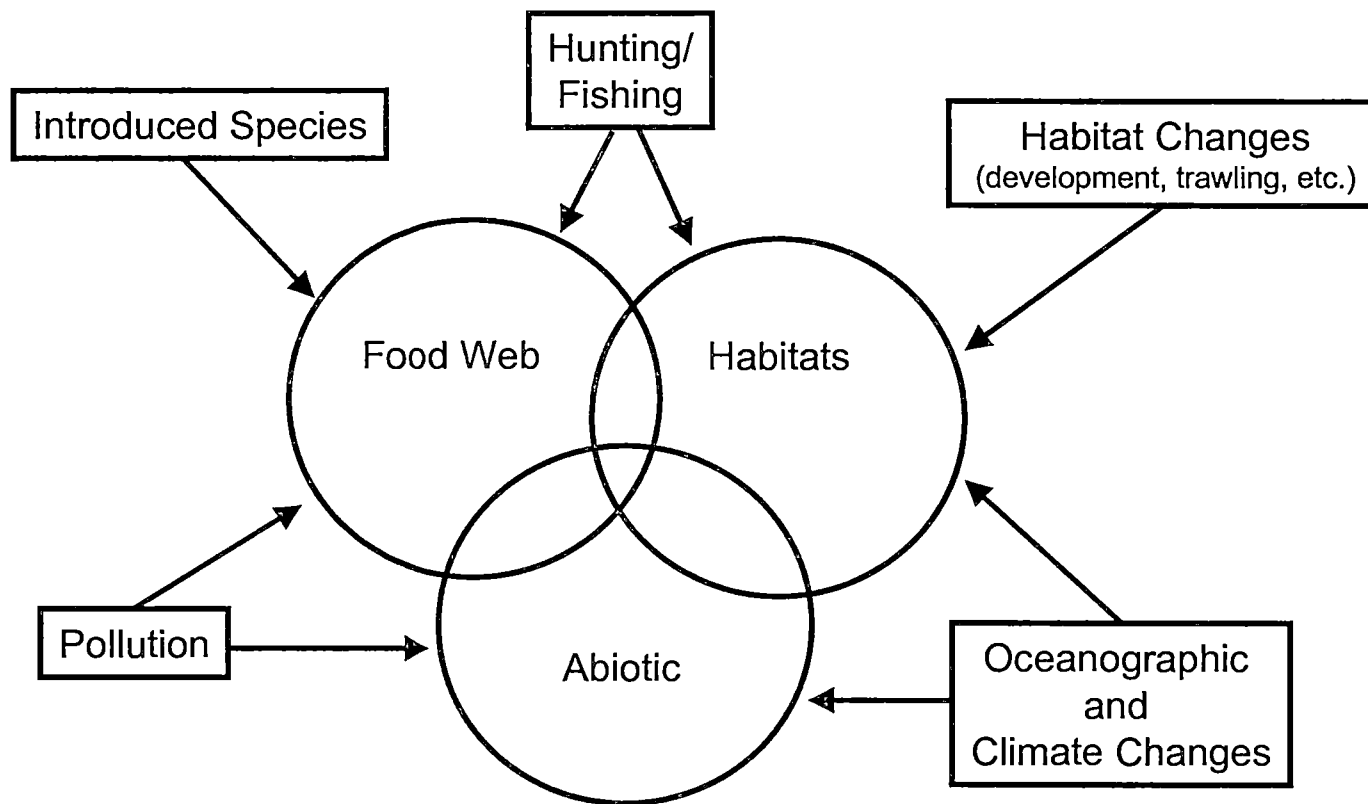
#### BOX 2-1

##### THE IMPORTANCE OF SELECTING A RANGE OF INDICATOR SPECIES

With a broad conceptual foundation in mind, it will be necessary to select a number of physical and biological parameters to monitor. The selection of these items—including species or groups of species—must be based on implicit or explicit hypotheses about ecosystem functioning and what is important to monitor to gain knowledge of that system (NRC, 2000). These hypotheses can be broad, such as that the system is most strongly affected by climate-driven physical processes that affect production (called “bottom-up control”); or by predators, including fishers, which structure marine communities and affect energy flow (called “top-down control”). Additionally, species may be selected because they are of great human interest or of particular commercial value.

However, with respect to the selection of species or species groups that are likely to have large effects on the food webs of the Gulf of Alaska and Prince William Sound, information from these and other similar systems elsewhere should be used to identify the most important species or species groups to monitor. This will be critical in developing the monitoring program, because the ability to detect changes in the system in a timely fashion will depend on the choice of subjects to monitor. New groups or species that may play pivotal roles in the food web should be monitored as well as taxa that have been monitored previously. Species such as sand lance (*Ammodytes hexapterus*), capelin (*Mallotus villosus*), and juveniles of pollock (*Theragra chalcogramma*) and herring (*Clupea harengus pallasii*) may be important in the transfer of energy from the zooplankton to larger predators such as whales, pinnipeds, marine birds, and species of commercially harvested fish. Likewise, large predatory fish, such as pollock, Pacific cod (*Gadus macrocephalus*), and arrowtooth flounder (*Aresthes stomias*) may play an important role in top-down control of juveniles of commercially important fish species. Monitoring of jellyfish populations is often overlooked, yet these can have large impacts on marine ecosystems and commercial fisheries (Brodeur et al., 1999).

It is important to identify species that may be important in shaping food webs and the fisheries dependent upon them. For example, Bailey (2000) hypothesized that variation in pollock recruitment has shifted from being controlled by environmental factors that determine the survival of very young fish to control by predation by large fish. Similarly, paying attention to hypotheses about the control of other ecosystems leads to the conclusion that some uncommon species that are presently not monitored should be monitored. For example, in the Bering Sea, Merrick (1997) suggested that there has been a trophic cascade following the removal of whales and other planktivores that previously helped suppress species such as pollock. He argued that the removal of the whales paved the way for increases in pollock and other piscivorous groundfish. Large baleen whales are apparently increasing in the Bering Sea (Baretta and Hunt, 1994, Tynan, 1998, 1999) and possibly in the Gulf of Alaska. We do not know what effect they will have on the ecosystems as they are presently structured, but if we fail to monitor them now because they are scarce, we will never know whether they exert a top-down control if they become more numerous. Selecting what is to be monitored is a crucial decision that will determine the success or failure of the GEM program. Hypothesis-driven choices will help to ensure that, to the best of present knowledge, the most critical determinants of ecosystem functioning will be monitored.



**FIGURE 2-1** The conceptual foundation of the GEM program must reflect the understanding that ecosystems change in response to physical and biological changes and human influences. Modified from Salomon et al., in press.

## THE SCIENTIFIC BASIS FOR GEM

The world's oceans have long been viewed as producing an inexhaustible supply of protein and other goods and services for human use. But evidence of the adverse effects of human activities on marine ecosystems is increasing and reminding us that the ocean's resources are not inexhaustible (NRC, 1999a). Furthermore, it is increasingly clear that the structure and functioning of marine ecosystems is profoundly linked to variability and changes in ocean climate and that those changes can occur rapidly. Thus, one of the greatest challenges facing society, and particularly managers of marine living resources in the Gulf of Alaska and elsewhere, is to understand the relative effects of human activities and natural changes in ocean climate on the goods and services supplied by marine ecosystems (NRC, 1996).

Why is this so difficult? One reason is that marine ecosystems are large, complex, interactive systems in which organisms, habitats, and external influences act together to regulate both the abundance and distribution of species (NRC, 1999a). Species interactions and the effects of variability in ocean climate on those interactions occur at spatial scales ranging from centimeters to hundreds of kilometers and on temporal scales ranging from minutes to decades. Human activities also act at various scales and may act selectively on certain components of an ecosystem (e.g., higher trophic levels), although such activities can have cascading effects throughout marine ecosystems (Carpenter et al., 1985; NRC, 1996). These disparate spatial and temporal scales make it difficult to measure the processes affecting marine ecosystems and to monitor ecosystem structure and functioning. Finally, perturbations to marine ecosystems often appear to act in subtle, nonlinear ways making it difficult to understand the consequences on ecosystem components that may be of particular interest to society, such as birds, mammals, and fishes.

Given the complexity of marine ecosystems and the failure of single-species management to produce sustainable fisheries in many parts of the world (NRC, 1999a), it is not surprising that both scientists and managers have increasingly promoted the concepts of multispecies or ecosystem-based management. However, it is clear that not enough is known about most large marine ecosystems, including the Gulf of Alaska, to implement a useful whole-system approach to management. So it is reasonable to consider what benefits could be provided from an ecosystem-based approach to management that cannot be gained from a single-species approach. The NRC (1999a) considered two benefits. One is the ability to broaden the policy framework to include a wide range of ecosystem goods and services, and acknowledge the critical role of ecosystem processes in providing those goods and services. The other benefit is an explicit recognition that segments of society may have different goals and values with respect to a marine ecosystem and that those goals and values may conflict.

It is within this context that the GEM program offers an unparalleled opportunity to increase our understanding of how large marine ecosystems in general, and the Gulf of Alaska in particular, function. To do this effectively, the GEM program must take a longer (interdecadal) view at appropriate spatial scales.

## GEM'S MISSION

The stated mission of the Gulf Ecosystem Monitoring (GEM) program is broad and ambitious: "to sustain a healthy and biologically diverse marine ecosystem in the northern Gulf of Alaska (GOA) and the human use of the marine resources in that ecosystem through greater understanding of how its productivity is influenced by natural changes and human activities" (EVOSTC, 2000a). While the mission statement is fine as a general statement and for conveying the basic intent to a general audience, it creates difficulties for those tasked to design and



implement a long-term science plan. According to this mission, GEM has a dual purpose: to sustain a healthy ecosystem *and* ensure sustainable human uses of the marine resources. Of course, humans are part of the ecosystem and in the largest view sustainable human use is inherently dependent on the health of the underlying ecosystem. But still, sometimes the purposes of sustaining ecosystem health and sustaining human use of marine resources run counter to each other, which will complicate planning. For example, management options designed to maximize benefits to humans would not necessarily be the same as options to maximize species diversity or some other measure of ecosystem "health." The second part of the mission statement assumes that ability to meet these objectives will be accomplished by understanding how both natural changes and human activities influence ecosystem productivity. Implicit in this rationale is that it is possible to separate the causes of natural changes from human-induced changes. It also assumes that a successful monitoring program has to take into account both climate change *and* changing patterns of human exploitation (e.g., fishing practices), which could call for attention to a very complex array of variables.

Another concern is that the term "healthy ecosystem" has no clear definition, in part because we lack clearly defined measures for assessing ecosystem health (NRC, 2000). For instance, if ecosystem health is judged on the system's ability to support top predators, then research might focus on marine mammals and birds. If ecosystem health is judged to be productivity of valuable fish species, then fisheries research would be key. If healthy ecosystems are judged to be those that provide sustained esthetic and subsistence benefits to humans, then research has to be directed at understanding natural variation in exploited resources and crisis events such as red tides. GEM could usefully develop a practical, working definition of ecosystem health that relates to particular aspects of the Gulf. These aspects could be related to ecosystem structure (the biotic community), or functioning (ecological processes such as productivity), or both. Using such a working definition of ecosystem health would allow GEM to use its finite funds effectively and avoid the risk of trying to monitor and study more than the program can successfully handle.

The mission statement gives equal weight to the role of natural changes and human activities as potential forces on pattern and process in the marine ecosystem. Yet the GEM program document primarily emphasizes scientific understandings of large-scale (climate, Pacific Decadal Oscillation) changes. It is unclear if this inconsistency occurs because smaller-scale human-induced changes are less well-known, less important, or too local and context-specific to be included in a plan for the entire Gulf of Alaska. In fact, the GEM draft in general articulates a marked turn away from local/community concerns toward a large-scale research program focused on questions defined by the physical and natural scientific community. This shift is not "wrong" but it is pronounced and there is a conceptual disconnect between the references in the narrative to community involvement and use of Traditional Ecological Knowledge (TEK), and the actual outline of the proposed research and the accompanying conceptual foundation. Changing fishing quotas, the role of hatcheries, the potential of areas protected from fishing—all ways to think about the effects of human activities—receive little attention in the GEM document. A program that addresses the objectives of the mission statement would need to strive to integrate studies of human uses of marine resources with studies of natural changes in the ecosystem.

Furthermore, while the separation of "natural" from "human" impacts may be a laudable goal, the program description does not seem to develop its intent on the anthropogenic impacts side of this equation. The GEM plan needs clearly defined measures of human induced changes in the Gulf of Alaska and Prince William Sound ecosystems.

The effects of the complexity of the mission statement will be most apparent as the program becomes operational (i.e., as the science plan is developed in more detail and as decision makers decide what to support). GEM program resources are expected to provide about \$5-10 million annually, at least for the next few years. When making financial commitments, program decision-makers will need to strike a balance among (1) long-term monitoring; (2) targeted

research; (3) data management; and (4) community involvement. It is not possible for the GEM program to be all things to all people.

## GOALS

The GEM program is intended to have five major programmatic goals:

- to detect (change in the ecosystem),
- to understand (the ecosystem),
- to predict (future changes in the ecosystem),
- to inform (the public, decision makers, and managers), and
- to solve (environmental problems).

The committee understands the need for stating such a broad and diverse set of objectives at the outset of planning, given the public's concerns and the political realities under which the Trustee Council operates. At first reading these goals seem laudable, appropriate, and logical. However, as the committee discussed the goals in depth, it became apparent that they are too far reaching, to the point of being unrealistic and setting the program up to be disappointing to those whose favored goals cannot be obtained (Box 2-2). The committee contends that the ability to detect change and to understand the causes of change are prerequisites to prediction, and thus are more attainable goals in the medium term. Prediction can be considered a long-term goal, but it should not be a driving force in the program's first decade (and possibly longer).

Although the GEM program might grow—its funding could double in 20 years if the principal is invested wisely and economic conditions continue to prosper—there seems to be no realistic chance of achieving all five goals within the foreseeable future. Yet the program's size is not the only or even the biggest difficulty. A much larger one is the difficulty of designing an effective program that has multiple, complex goals. A strategy for providing focus is essential. The unique opportunity of GEM, as its title reflects, is to establish a truly long-term monitoring program. It would thus seem advisable to focus the program around that goal and base the science plan on it. There could be smaller components to support specific, albeit related, elements of the other goals.

### BOX 2-2

#### ARE THE GEM GOALS ATTAINABLE?

*Detection* of change is a reasonable and attainable goal and should be one of the core purposes of GEM. Detection of change should not be assumed to be easy: the climatic regime shift that occurred in the Gulf of Alaska in the late 1970s was not detected until 15 years after it occurred, because picking up the signals is challenging. Detection hinges on measuring appropriate variables, consistent interpretation of data, and having a priori expectations of what changes will occur and why.

*Understanding* change and the causes of changes is a valid goal for the GEM program, and movement toward understanding is attainable. Understanding emerges from two types of studies: smaller process-oriented studies that test particular hypotheses and broad synthesis-type studies based on models that can be "tested" with independent data (that is, data that were not used to build the model). To develop understanding of the issues most important to managers and citizens, they must be included in the process of choosing research questions.

*Prediction* is a difficult goal that is inherently long-term and difficult to achieve. Both scientists and managers have a fairly poor track record of foreseeing environmental change. For example, the El Nino-Southern Oscillation (ENSO) illustrates the challenge of striving to predict change. Scientists have carried out intensive observation of ENSO phenomena for several decades, in addition to records of casual observations that go back more than 100 years. Yet it took about two decades of repeated observations before an understanding of ENSO was developed. And predictions of ENSO are now attempted, but with limited success. In comparisons with the Gulf of Alaska ecosystem, ENSO has a large signal with global responses. It is a physical system that should actually have a more predictable response than a complex physical-biological system with anthropogenic influences, as is the case in the Gulf. ENSO also has a much shorter periodicity (3-7 years) than the Gulf of Alaska (20-50 years), so that 20 years of ENSO observations have more degrees of freedom than 100 years of sampling in the Gulf of Alaska. Thus the goal of predicting change in the Gulf of Alaska in the next 100 years is highly problematic.

*Informing* managers and the general public of research results is both possible and necessary, given the GEM program mission. But this element would seem to be an output of earlier goals, and not a goal in its own right.

*Solving* environmental problems is, like prediction, an ambitious and long-term goal. Solving problems, per se, is not a logical purpose for a research program, but rather is what should happen as managers put scientific information to use.

Why is it risky to propose multiple complex goals? If the plan allows research on every question or issue, GEM may fail to provide insight into the system as a whole. Perhaps worse, GEM could be co-opted to answer questions (e.g., on fishery catch quotas or contaminants) that are clearly the responsibility of others. The risk of a plan that encompasses everything and anything can be alleviated by improving the focus of GEM during this planning phase. Although committee members agree on the need for focus, all acknowledge that there are several viable options of how to focus (Box 2-3). These range from plans that concentrate on oceanographic measurements to test hypotheses about climate regime shifts to plans that emphasize modeling and synthesis using data sets already in existence.

In general, for a long-term monitoring program, species and sampling locations should be selected based on the ability of the information to help answer questions about ecosystem functioning. In terms of focus, the GEM program would be most effective if it focused on monitoring and identifying and addressing important data gaps. A monitoring program could consist of regular biological surveys of community structure including diversity at multiple locations sited in Prince William Sound and on the neighboring inner shelf of the Gulf, quantification of the recruitment dynamics and ecology of a set of key species at selected locations, and measurements of physical oceanographic parameters and climatological conditions in the Sound and on the inner shelf of the Gulf. Short-term projects might focus on dynamics of key species and their interactions, on mechanisms underlying production, growth, larval supply, larval transport, food availability, and similar processes.

The committee agrees that it is appropriate to identify a number of short-term objectives (attainable in 2-3 years) and long-term objectives (5+ years) that might have tangible benefits for policy makers, resource managers, and the public. An example of a short-term goal would be to identify trends or relationships by modeling historic fisheries data in relation to climate data and contaminant levels in biota. A long-term goal might be to measure and ultimately model climate variability in Gulf of Alaska as it relates to near- and off-shore fishery production. While the GEM program can take advantage of opportunities to leverage funds by coordinating and forming partnerships with other research programs underway in the Gulf of Alaska, it should be careful that doing so does not overwhelm or distract its small administrative staff or dilute the program's impact.

**BOX 2-3**  
**PROVIDING FOCUS BY SELECTING KEY RESEARCH QUESTIONS**

GEM is a unique opportunity to establish a realistic long-term monitoring program. Thus one logical approach would be to focus the program around long-term monitoring as the core activity, with smaller elements added to meet other goals, and base the science plan around this two-prong structure. To make success more likely, program planners would need to select a few key questions to guide the work, and these questions, in turn, should be based on some clear conceptual model (e.g., NRC 1995, 2000). One way to begin is to ask what parameters are most able to provide insight into the desired questions if there is a long time-series of data available. Another approach is to identify the questions for their own sake and let them suggest the parameters to be monitored.

The questions listed in Appendix C 2 of EVOSTC, 2000a are a good start. The quality and relevance of the questions suggested by members of various communities that made presentations in Anchorage on October 6, 2000 were excellent. For example, the question about the degree to which ocean conditions (productivity) affect the growth and survival of juvenile salmon and hence the degree to which science can help predict the probable percentage of returns from hatchery releases is very relevant. To answer this question requires information on physical, chemical, and biological features of the ocean, including information about salmon. Long time-series of information on such factors would not only help answer the specific question, but would also be of great use for understanding related questions, such as insights into fluctuations in the populations of other important ecosystem components, including marine mammals, crabs, marine birds, and herring.

Several approaches could help impose greater focus on GEM during implementation, even given its broad mission and goals. The committee is not recommending these as the "right" tasks, but as illustrations of the range of thinking that is possible.

- Develop a whole-ecosystem fishery model as a guide to think about what needs to be monitored. Such a model would use current and historical data to relate yields to climate data and contaminant levels and might stress biological and physical endpoints (zooplankton/phytoplankton blooms, macrofauna populations) and climate and physical oceanography endpoints, in conjunction with modeling.
- Identify indicator taxa for monitoring. Species should be selected based on the ability of monitoring information to provide information on ecosystem functioning, not solely to reflect economic value or political importance. This takes smart choices so the indicator species reflect a wide set of variables for measurement and serve as sentinels to provide clear and early warning of change.
- Conduct or take advantage of large-scale adaptive management studies that others implement. The Trustee Council does not have the authority to impose management changes, but it could, for example, follow population trajectories in areas with and without fishery closures or record biogeochemical variables in bays before and after aquaculture operations are instituted.

## ADMINISTRATION

The EVOSTC has administered its research program to date using a combination of a small paid staff (responsible for most aspects of program planning and implementation), paid peer reviewers (responsible for judging quality of proposals), and scientists (through participation in an annual workshop devoted to presentation of research results and discussions of needed future directions). This approach has increased in effectiveness over the years. With the new GEM program, with its large mission and long time horizon, the Trustee Council consciously sought to evaluate its approach and make adjustments as needed to ensure the program's long-term success and scientific credibility. How best to administer the new GEM program over time again emphasizes the importance of being clear about the program's focus – who sets it and how it is implemented.

One of the most important administrative questions concerns the role of Trustee Council staff in the program plan. Is GEM to act like a science funding agency, where scientific questions emerge from outside the Trustee Council and are filtered and ranked by independent advisory groups and implemented by staff (a bottom-up approach), or more like a foundation, where questions and projects are identified by the leadership and staff and then proposals in those areas are sought (a top-down approach)? Most long-term science plans run on the former model, and the committee believes this would be best for GEM as well. We recognize, however, that the program will always have some elements of both approaches, given its origins and the strong role of agency leaders on the Trustee Council itself. Furthermore, detecting change will require that a core set of variables be measured over a long time period, which is most likely to occur if the Trustee Council makes those studies a priority.

Implementation of the GEM science plan will raise many questions requiring input from scientists. The committee believes there will be a long-term need for an independent scientific advisory committee, peer review of proposals by individuals outside Trustee Council agencies, and periodic reassessment of monitored variables. We had significant discussions about the degree to which the administrative structure facilitates managing and sharing data. Information gathered in GEM should be accessible to the general public, managers, and other scientists in a coherent and understandable form within several years of its collection. Such data management requires in-house expertise, recognized as expensive but necessary.

## ORGANIZATION AND GOVERNANCE

Other large, long-term research programs have struggled with how best to organize and make decisions (NRC, 1999b) and GEM planning staff should establish strong ties with other ongoing ecological programs such as the Northeast Pacific Global Ocean Ecosystem Dynamics Program, the NSF-funded Long-Term Ecological Research Network, and NOAA-funded programs in the Gulf of Alaska and the Bering Sea. The committee reviewed a number of these programs to draw lessons about how other programs handled common issues, such as how long the programs took to develop (Box 2-4), how strategic guidance and peer review were obtained, and how the programs balanced the need for stable commitment to a long-term vision and flexibility to take on newly identified issues.

**BOX 2-4**  
**THE EVOLUTION OF MAJOR SCIENCE PLANS TAKES TIME**

The creation of all long-term science plans takes time because the process of developing the plan is as important as the details included in the plan. For example, the U.S. portion of Joint Global Ocean Flux Study (JGOFS) had its beginnings in 1984, with the international component starting about three years later (NRC, 1999b). The formation of this effort was not simple.

Initially, the U.S. Global Ocean Flux Study (GOFS) was an outgrowth of three separate projects that were active in the early 1980s: the National Academies' Ocean Studies Board was investigating the feasibility of a program that would conduct long-term studies of the biological and chemical dynamics of the ocean on basin-wide and global scales; the NSF Advisory Committee for the Ocean Science Program was developing a long-range plan, and a separate National Academies committee had identified initial priorities for the International Geosphere-Biosphere Programme. As the relationships among these activities became clear, and with support from NSF, NASA, ONR, and NOAA, a group of scientists met in 1984 at Woods Hole under the auspices of the National Academies. This generated the basic scientific underpinnings that defined the proposed mission for GOFS and led to the GOFS Scientific Steering Committee, which was formed in 1985. Then, after continued discussion and planning, in 1987 an overview document was published that more fully outlined the program. Between 1986 and 1990, the science community produced nine reports that summarized the recommendations of workshops designed to expand on the general plans, covering topics such as water column processes, benthic processes, continental margins, data management, and modeling. Finally, in 1990 the JGOFS Long Range Science Plan was published, based in part on the recommendations of the workshops. It was 1995 when JGOFS released an Implementation Plan, which gave the status of the JGOFS research and future directions.

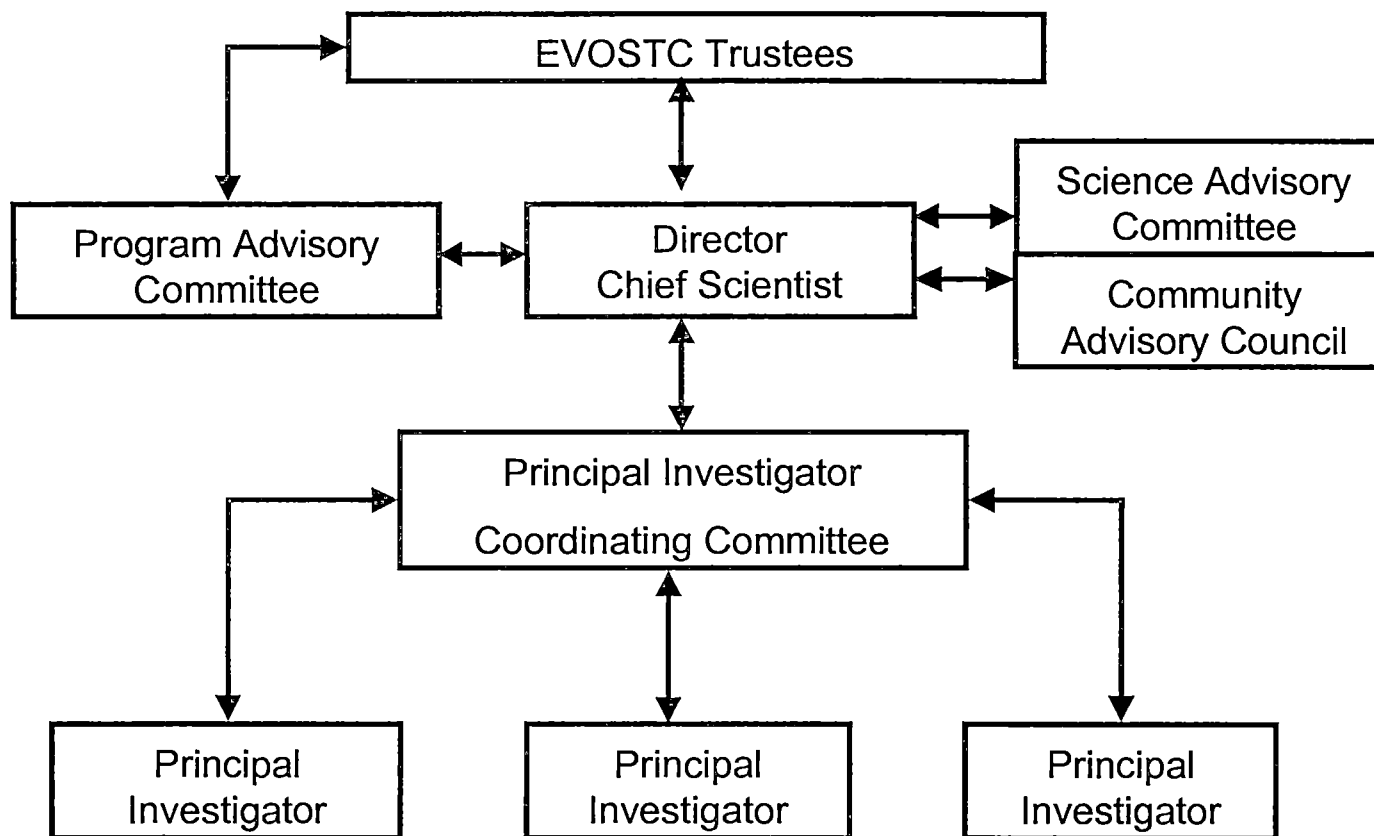
One strength of a major research program is the ability to draw and direct a significant amount of talent and scientific interest toward a large and often high profile scientific challenge. But to realize that opportunity requires significant advance planning and coordination, and one key element is taking the time necessary to allow wide participation in the program's definition and evolution.

Source: NRC, 1999b.

Overall, the structure currently in use by EVOSTC has worked well to date, but will need to evolve to handle GEM's broad, long-term, more scientifically complex goals. Based on its review and deliberation, the committee believes that the GEM program requires a more fully developed organizational structure to provide guidance over the long-term. To fulfill the potential of GEM, execute the scientific objectives, address the expressed interest in community involvement, and attain the best quality science, the management of the proposed GEM program is likely to need an enhanced administrative structure, perhaps similar to that used in other large research programs. Such a structure would likely include an Executive Director / Chief Scientist; a Program Advisory Committee (PAC); a Science Advisory Committee (SAC); a Community Advisory Committee (CAC); and, a Principal Investigator Coordinating Committee (PICC) (Figure 2-2). While the precise form, lines of authority, and responsibilities remain to be defined, the general roles of the important components would be as follows:

- *Executive Director /Chief Scientist.* The role of the Executive Director would be to interact with the Trustees, the public and scientists in the GEM program. The Chief Scientist's role would be to make certain the quality of science is maintained and properly executed. Whether this is one person or two is less important than being sure the person or persons are capable of both administrative and scientific communication and organization.
- *Program Advisory Committee.* The Program Advisory Committee (PAC) would be a rotating committee of scientists and community representatives external to the main scientific programs of GEM. The PAC would report to the Executive Director/Chief Scientist and the Trustees. The PAC would evaluate the selection of members for the Science Advisory Committee, and the Community Advisory Committee. The PAC would periodically review the GEM program and advise the Executive Director/Chief Scientist and Trustees on the progress, scientific accomplishments and the future course of development of the GEM program.
- *Science Advisory Committee.* The Science Advisory Committee (SAC) would be responsible for obtaining proposal reviews and ranking proposals. It would also address questions of scientific balance and how proposals relate to the goals of the GEM program. The SAC would be composed of scientists (academic, government, and/or agency) who have no direct stake in GEM. The composition and size of the SAC should be sufficient to bridge the range of scientific disciplines that are part of GEM. The suggested package of acceptable proposals would then be communicated to the Executive Director/Chief Scientist, who would clear the final proposal selection with the PAC. The SAC and CAC (described below) should have periodic joint meetings.
- *Community Advisory Committee.* The Community Advisory Committee (CAC) would comprise representatives from various communities interested in and affected by the Gulf of Alaska ecosystem. The CAC would provide input to the Executive Director and Trustees on issues of community importance in development of the GEM program and would work closely with the SAC. This committee would have a significant advice-giving role, with active involvement in setting priorities and defining questions. The committee could have a direct role in selecting community-based project proposals, if this approach is incorporated into GEM in the future. The CAC could also be helpful in suggesting ways to disseminate information to communities.
- *Principal Investigators Coordinating Committee.* The Principal Investigators Coordinating Committee (PICC) would be composed of the principal investigators and GEM Data Manager. The PICCs function would be to ensure coordination, where appropriate, plus certification of the quality of the data. The reports of the PICC would be vetted through the PAC who would advise the Executive Director/Chief Scientist of the status of the GEM program.

The tradition of having all program participants meet periodically (i.e., the annual Restoration Workshop) is likely to remain important, as this provides valuable opportunities to share data, form partnerships, and plan new activities; however, it is possible that the timing and design of the meetings will need to change to accommodate any new administrative structures and the needs of GEM as it takes shape.



**FIGURE 2-2** Possible organizational structure for the GEM program.



## GEOGRAPHIC SCALE

The geographic scale currently proposed in the GEM document covers the entire northern Gulf of Alaska ecosystem, and this is appropriate given the current mission and goals. However, it is likely that such a large area will be a challenge given GEM's available resources at this point in time. A more feasible scenario for long-term monitoring over multi-decadal time-scales is to study a smaller area in depth. Selection of a tractable, well-delineated geographic 'core' area will allow GEM to maintain funding for the type of high density sampling, on both temporal and spatial scales (multi-station/multi-depth/multi-species; infaunal, epifaunal, pelagic) unprecedented in marine monitoring programs. It is critical that this geographic core remain unchanged for the life of the GEM program.

The committee recommends that the primary geographic focus of the GEM monitoring program begin with Prince William Sound (PWS). The PWS ecosystem received the greatest amount of oiling from the spill and might be expected to be among the last areas to recover. As such, PWS could be a useful indicator of wide-scale recovery of the area. In addition, since PWS will continue to receive some degree of anthropogenic impact (e.g., heavy commercial shipping traffic, fishing, harbor runoff, recreational boating), comparison of data on the PWS ecosystem with that collected at relatively non-impacted sites would allow separation of anthropogenically induced changes from natural changes. Importantly, data on the PWS ecosystem would be immediately useful to managers and of interest to local fishers, including PWS subsistence communities, increasing the likelihood of strong community support for long-term monitoring of this area as a starting point.

A focus on the Prince William Sound coastal ecosystem, defined according to physical and ecological boundaries, is logical. The coastal zone is the marine area most heavily affected by human activities and is typically the most productive marine habitat. It is critical with respect to issues of larval transport, recruitment, and growth for species living in, or passing through, the nearshore ecosystem. The nearshore region is believed to be the most critical habitat for salmon and serves as an avenue for marine mammal migrations. The marine ecosystem of the Sound is forced by offshore and along-shore influences, having responses that can be traced offshore to the central Gulf of Alaska and along-shore to the equatorial Pacific. It is not well defined according to depth since water depths of more than 200 meters are found throughout this coastal system. Other programs and agencies have as their mission research on fisheries and oceanography in the more offshore waters of the Gulf. Although this research is probably not as well integrated or synchronized as would be desirable, it would seem that use of GEM funding to carry out such research would be duplicative and less appropriate than focusing on the coastal ecosystem.

As monitoring programs progress, there is a tendency to continually expand ecosystem boundaries. Such boundaries must be rationally established based on resource limitations. Selection criteria for these boundaries should include not only contaminant status (oiled or non-oiled), but also the existence of data for these areas, and consideration of the physical (fronts and currents), chemical (sources and fluxes) and biological (populations) properties that delineate ecosystems.

It is imperative that the PWS ecosystem be seen in the context of the larger Gulf of Alaska and North Pacific ecosystems because it is hypothesized that these systems are strongly linked. The sound is influenced by oceanographic conditions on the Gulf continental shelf, which are, in turn, linked to even more distant oceanic and climate conditions. Clearly, GEM does not have the resources to make measurements on ocean basin or global scales.

Fortunately, the importance of most shelf- and basin-based influences on the PWS ecosystem diminishes with distance from Prince William Sound. Also, such data are available from other programs. For example, some hypotheses suggest that El Niño-Southern Oscillation processes in the tropical Pacific might influence marine and climate conditions in PWS. GEM

will be able to use data collected by NOAA's climate programs to explore some of those questions. While an understanding of the oceanographic conditions on the shelf will be essential to an understanding of the seasonal and decadal changes in Prince William Sound, other oceanographic sampling programs such as OCSEAP, GLOBEC and ARGO<sup>1</sup> Global Ocean Observing System have been or will be carrying out some of the critical measurements. GEM must integrate its observations with these efforts and should base some of its geographic site selections on these programs and their existing time series data.

Since no single person has the broad knowledge and background needed to select the boundaries for this program, it is recommended that an interdisciplinary workshop be held to discuss these boundaries. It should include participation from all disciplines and from similar ecosystem monitoring programs elsewhere (e.g., fisheries studies in eastern and western Canada).

High density, long-time scale data are essential to building well-parameterized dynamic ecosystem models. The strength of such models is determined by the quality and quantity of data available to build them. For the Gulf of Alaska, only GEM has the potential to maintain a core, geographic monitoring area for which such uninterrupted, long-term data could be generated.

## DATA MANAGEMENT

As planning for GEM proceeds, it will soon need to deal with essential practical issues. One such critical issue is data management. The success of GEM will be critically dependent on a Data Management System (DMS). The DMS would be composed of a data manager and the necessary infrastructure to organize, disseminate and archive the data. The data manager would participate in the planning of the sampling program, organizing the data, assuring data quality, archiving the data and providing data to the PIs and public. The data manager must coordinate with researchers (e.g., serve on the PICC) and provide the "big picture" on variables being monitored (e.g., periodically report to the PAC). These groups would develop a GEM data policy which promotes the exchange of data between GEM investigators, makes the data available to the public in a timely manner, and insures that the GEM data are properly archived. To achieve the goals of the GEM program, a strong commitment to data management is required of the participating scientists. In accepting support from the GEM program, each investigator would be obligated to follow the data management requirements as an integral aspect of their participation in the GEM program.

The data sets would be organized in a manner that will be useable to both GEM scientists and the public via the Web or future global communication networks. Examples of these types of data management activities and policies can be found for other U.S. oceanographic programs (JGOFS = <http://usjgofs.whoi.edu>; GLOBEC = <http://cbl.umces.edu/fogarty/usglobec>; CoOP = <http://starbuck.SKIO.Peachnet.coop>). There would be several levels of data archiving and data management ranging from international archives to PI websites. The GEM data would also be submitted to the National Oceanographic Data Center (NODC) where it will be permanently archived.

There would be working data archives within the GEM program that contain the program data plus other data sets or Web links to data sets that will be necessary for the analysis of the GEM data. Examples of pertinent ancillary data sets are those from EVOS funded studies, NOAA's TAO (ENSO) data, PDO estimates, the Gulf of Alaska GLOBEC program, and historical regional oceanographic and climate data. Another example is the PICES TCODE

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<sup>1</sup> OCSEAP is the Outer Continental Shelf Environmental Assessment Program. GLOBEC is the GLOBAL Ecosystems dynamics program. ARGO is an array of temperature/salinity profiling floats and is part of the Global Climate Observing System.

(Technical Committee on Data Exchange) Web page that contains links to long-term, interdisciplinary data sets for the North Pacific.

Access to the data archives and software display will be an important component to the public outreach of the GEM program. There would be multiple levels of complexity to the data access ranging from users with limited backgrounds with these data, to use by the investigators who gathered the data. The data archives will be essential to ecosystem modeling and synthesis of the GEM program.

## **COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE**

The GEM program document (EVOSTC, 2000a) indicates a clear desire to incorporate community involvement and traditional ecological knowledge (TEK) into the overall GEM program. This is also seen in an earlier document (Appendix A, EVOSTC 2000b), a special edition of the regular newsletter that is distributed to keep people abreast of GEM, which provides even greater clarity as to the fundamental components envisioned for the GEM program. This newsletter summarized the GEM program by explaining that "GEM will have three main components:

1. long-term ecosystem monitoring (decades in duration);
2. short-term focused research (one to several years in length); and
3. ongoing community involvement, including traditional knowledge and local stewardship."

Although the rationale for the third component is never clearly stated in the GEM program document, the committee concludes that involvement of local Native, fishing, and other communities is an appropriate and necessary component of the GEM program. Questions about the relationships between local people and scientific researchers pervade the literature on TEK (e.g., Baines and Williams, 1993; Rose, 1993) and on local participation (e.g., Chambers, 1997; Holland and Blackburn, 1998). The close correspondence between issues present in the GEM program planning context and themes in the general literature suggests that the GEM program is not unique in terms of the challenges it faces with TEK and community involvement issues (see Box 2-5). Because the GEM program has an extraordinarily long time frame and strong ties to local communities, these challenges are likely to be exacerbated—not ameliorated—if left unanswered over time.

### **BOX 2-5**

#### **TRADITIONAL ECOLOGICAL KNOWLEDGE**

As the pace of ecological change increases, so too does the need for baseline information with which to direct conservation and restoration activities. There are complementary sources of knowledge about local ecosystems held by people whose lives are interwoven in complex ways with particular lands and waters. Rich local knowledge accumulated over generations, embedding observations and corresponding cultural adaptations provides valuable information within a context of long-term ecological change. The language of Traditional Ecological Knowledge is not the language of scientific discourse. Mutual understanding requires mutual respect, an investment of time, and willingness on the part of Western scientists to accept that TEK is grounded in moral, ethical and spiritual worldviews that are not out of touch with reality (Martinez, 2000).

The challenge then is not whether community involvement is warranted, but rather how to build such involvement in a meaningful way. With respect to the first two of the three components identified above, the committee has stressed the need to provide the GEM program with a foundation that is simple, robust, and adaptable. Community involvement needs a similar foundation that permits the local issues to be addressed in a meaningful way from the very beginning of the program.

To provide a foundation for community involvement, there are three possible arrangements to consider. First, every project sponsored under the GEM program could be required to feature community involvement. But this first approach is fatally flawed because such formulaic insistence on community involvement in every project will do little more than encourage tokenism. Second, the GEM program could include a separate, distinct "community GEM program" that would operate with autonomy. However, this approach is vulnerable to the inevitable difficulties of allocating between communities, and would limit opportunities for exchange between scientific and local communities.

The committee therefore suggests an approach based on shared power and shared opportunity between the scientific and local communities (Box 2-6). As envisioned in Figure 2-2, the committee sees creation of a Community Advisory Council (CAC) that is parallel in function to the Science Advisory Council (SAC). The goal of real shared power requires community representation at the highest organizational level below the chief scientist. For community-originated studies to be effective, these structural provisions of power to communities must be accompanied by opportunities to gain funding. Also, to ensure genuine incorporation of community interests and local knowledge and experience, the program should avoid the temptation to fund only those proposals in the standard format and phrasing of the scientific establishment to the exclusion of projects that reflect local interests and knowledge. This approach to community involvement would have to be regarded as a work in progress because building the necessary relationships and developing a process that works will take time.

In many respects, the GEM program will be breaking new ground in terms of integrating community involvement into a long-term science plan. However, some principles apply throughout the structure envisioned in Figure 2-2. The goal for the selection of all projects (whether through the SAC or the CAC) is to have a process that is open, fair, and accepted by all. The necessity to rotate membership on advisory groups applies throughout the structure.

In summary, the committee recommends that community involvement be designed into the GEM program from the start in a manner that promotes meaningful involvement and provides for flexibility into the future as the GEM program evolves.

**BOX 2-6**  
**AN EXAMPLE OF COMMUNITY INVOLVEMENT:**  
**THE FISHERMAN AND SCIENTIST RESEARCH SOCIETY**

Community involvement in scientific research aimed at gaining a better understanding of marine ecosystems can bring benefits. However, for community involvement to succeed over the long term, it must be meaningful. That is, communities must have a role in helping to define what will be done and how it will be done. They must also be actively involved in conducting the research, analyzing data, and disseminating the results to members of the community and other stakeholders.

One example of this approach to community involvement, and how long it can take to develop, is underway among coastal fishermen and fisheries biologists from the Canadian Department of Fisheries and Oceans (DFO) in Nova Scotia, Canada. The Fisherman and Scientist Research Society was formed in the early 1990s to help develop a common understanding of the status of commercially harvested fishes and invertebrates on the continental shelf off Nova Scotia. Officers of the Society are fishermen elected by the membership. The Executive is advised by Directors at Large, drawn from the membership and participating member scientists, a Communications Committee and a Scientific Program Committee. More than 300 members from fishing communities across the province meet annually to discuss the results of research undertaken in the previous year and to plan new major initiatives. The first several years represented a difficult and uncertain period for the Society. It takes time, hard work, and a commitment to succeed to overcome existing biases and to build new relationships, based on mutual respect.

Over the past 8 years, however, the Society has made tremendous strides. It has undertaken collaborative research with the DFO on a range of topics including inshore fish abundance surveys, fish tagging, studies on fish diets and physical condition, lobster recruitment, and coastal ocean temperature. The impetus behind most of these studies has come from questions posed by the membership with their direct involvement at the community level. As the Society matures the range and scope of the research conducted continues to grow, providing fisheries scientists and oceanographers with an opportunity to address questions that would be difficult to address otherwise.

## Conclusions and Recommendations

The committee offers the following recommendations as guidance to steer future development of the GEM program:

### MISSION & GOALS

- While the GEM mission provides a good general statement of intent, it is unrealistic to believe that the program can address all five stated goals equally. Certainly, some effort can go toward each of the goals, but the program should focus on the goals most related to long-term monitoring: detection of change and understanding the causes of change. Together, these will facilitate progress in learning to predict future changes, although the Trustee Council should be cautious about having too high expectations of predictability from such a program. The goal of informing the public can be built around this core structure. The goal of solving problems for resource managers and regulators also can be addressed in parallel to some extent, but should not drive the conceptual foundation of the program.

### STRUCTURE & APPROACH

- The science plan should be strongly based on a broad conceptual foundation to make sure it is soundly developed, has long-term viability, and that it is defensible and justifiable over time. The conceptual foundation should be ecosystem-based. It should include natural and human-induced changes and reciprocal interactions between humans and the marine environment. It should be flexible so it can accommodate changing needs without compromising the core long-term measurements.

- There are two ways to design a research program: projects can be selected to investigate particular questions (hypotheses) or they can be selected to monitor specific variables identified as important to the goals. The committee believes that the most useful approach for understanding the dynamics of an ecosystem will be hypothesis-driven, but we recognize that a combination of these approaches may work best for GEM because of its need to respond to public needs. That is, we believe that GEM – based on a conceptual framework – should articulate two or three fundamental questions about the ecosystem that then guide the selection of species and other physical and biological parameters to be monitored.

- Although it is properly intended to be a long-term program, it is wise for GEM to include some short-term projects with clear management implications. The science plan needs to

be flexible and able to accommodate changing needs without compromising the core long-term measurements.

## **ORGANIZATION AND GOVERNANCE**

- All major science programs, especially those of the scope, duration, and complexity of GEM, use a governance structure with layers of both staff and stakeholder input to provide direction, set priorities, and ensure that the program continues to meet its goals over time. The GEM organizational structure should be enhanced along the lines of Figure 2-2 (flow chart), incorporating mechanisms for independent program planning, proposal review, and community involvement. This general approach incorporates many of the main features of most other successful large science programs and seeks to ensure quality, longevity, independence, and openness.
- Gem should be prepared to plan a series of small, focused workshops (held over time) that will provide the detailed guidance needed to implement the science plan. For example, workshops will be needed to determine the boundaries of the core monitoring area, plan integrative modeling of GEM systems to reveal nodal species and critical measurements, plan data management, and determine what sampling tools will be appropriate for the monitoring program.

## **GEOGRAPHIC SCALE**

- Although the total domain to be covered by GEM is legitimately large, the long-term GEM monitoring studies that form the core part of the program should focus on tractable areas where critical environmental data is needed.
- The primary geographic focus for monitoring should begin with Prince William Sound, because this ecosystem received the greatest amount of oil and might be expected to be among the last areas to recover, thus serving as a useful indicator of wide-scale recovery. At some point, GEM will need to define more clearly the ecosystem they are monitoring, perhaps through a workshop that addresses what scale best supports the GEM core program.

## **DATA MANAGEMENT**

- GEM needs to have a major administrative commitment to data management. This includes mechanisms and procedures to ensure data quality, provide data archiving, and take steps that data are available into the future as platforms and languages change over time. There should be mechanisms to make data available to the public and among researchers.

## **COMMUNITY INVOLVEMENT**

- For the GEM program to be durable over time, the organizational structure needs to incorporate meaningful community involvement. This involvement should occur at all stages, from planning (e.g., selecting the questions to be addressed and variables to be monitored) to oversight and review.

## FINAL THOUGHTS

This committee was charged to provide feedback on the EVOSTC 2000a document. But as the committee held its meetings, the GEM program has been evolving and we have been kept abreast of those changes as much as possible. We focused this report on the written EVOSTC 2000a document because that document is, so far the most authoritative, written description of the program and because it is difficult to provide advice on orally presented ideas that are still in the process of evolving. However, the committee wants to acknowledge that the plan for the GEM program has changed much since the EVOSTC 2000a document was distributed. Thus the following is based solely on our interpretation of where it "sounds" like the GEM plan is headed.

The committee wishes to express concern that the GEM program may be moving toward a piece-meal, small-scale, project-driven approach. GEM appears to be evolving from being oriented toward ideas and hypotheses, as expressed in the April GEM document, to being oriented toward specific tasks, as emphasized in subsequent discussions and draft materials. It seems to be losing sight of its ecosystem focus as it selects individual species for attention. We understand that the creation of a complex new program can be a messy process; thus we remain optimistic that the core mission of GEM is still to provide broad, ecosystem-based, long-term monitoring and research that will lead to an integrated understanding of the Gulf of Alaska ecosystem.



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# **APPENDIXES**

## A

### **EVOSTC Restoration Update, Winter 2000, Volume 7, Number 1: Elements of GEM**

GEM will have three main components:

- long-term ecosystem monitoring (decades in duration);
- short-term focused research (one to several years in length); and
- ongoing community involvement, including traditional knowledge and local stewardship.

In addition, GEM will require a strong science management effort and a concerted public information and data management program.

#### **LONG-TERM ECOSYSTEM MONITORING**

GEM will contribute to a core of strategic measurements taken over decades by many agencies in order to track changes in the outer shelf and coastal regions of the northern Gulf of Alaska. Monitoring goals are to understand the factors involved in productivity of fish, birds, and marine life, improve our ability to distinguish between natural and human-caused changes, and accurately model and predict ecological change. This information will be available to organizations, agencies, universities, and individual stakeholders for the use, management, and conservation of marine resources.

GEM will take advantage of existing projects being carried out by agencies and other institutions. Funds will be used to obtain measurements that are essential to taking the pulse of the Gulf of Alaska and that are not being obtained reliably through other programs.

#### **SHORT-TERM RESEARCH**

Strategically chosen research projects with relatively short-term goals will be funded as needed. Research will:

- Follow up on issues related to any lingering effects of the *Exxon Valdez* oil spill. This research is expected to diminish over time as impacts from the spill become more and more difficult to distinguish.

- Explore questions or concerns that arise out of the monitoring data. Research would focus more on individual species to understand how they are being impacted by changes in the ecosystem. A sudden rise or decline in a species population is one way to trigger such research.
- Provide key information and tools for management and conservation purposes. This would include, for example, improved scientific techniques and better technologies for stock assessments of fisheries. Research can also identify sensitive habitats in the marine environment so that this information can be considered in management strategies.

### **TRADITIONAL KNOWLEDGE, COMMUNITY INVOLVEMENT, AND LOCAL STEWARDSHIP**

The last 10 years of oil spill research has proven that community involvement can provide important observations and insights about changes in the status and health of marine resources. Encouraging local awareness and participation in research and monitoring enhances long-term stewardship of living marine resources.

Local monitoring, documentation, and stewardship projects must be linked under GEM wherever possible with other monitoring, research, and conservation projects to promote sharing of information and ideas. Scientific steering committees, composed of academic, agency and local representatives, can identify and oversee opportunities for productive collaboration.

The actual mechanisms for achieving this goal are not fully developed. Several approaches have been tried in the current restoration program and elsewhere in Alaska, and GEM will draw on these experiences to design processes for involving communities and their expertise. One approach, the Youth Area Watch, has proven to be an effective and popular means of involving and educating young people and their home communities about oil spill research. Similar projects may be developed as part of GEM in coastal communities throughout the oil-spill area.

### **SCIENCE MANAGEMENT**

It's expected that GEM will be governed by the Trustee Council until impacts from the oil spill are no longer discernible. It would be administered by the current Restoration Office, made considerably smaller to reflect the scope of the program.

A senior staff scientist will work with the executive director, Trustee Council, scientific community, resource managers, and stakeholders to implement and evaluate GEM. The program will be administered consistent with the Restoration Plan, adopted by the Trustee Council in 1994.

Public participation and independent peer review will be an essential part of the process. An independent panel of scientists will fine tune the GEM program every five years.

### **PUBLIC INFORMATION, DATA MANAGEMENT, AND INTEGRATION OF RESULTS**

Gathering data is one thing. Managing and maintaining that data in a consistent form that can be utilized easily by researchers is another. It is essential that a strong data management strategy be in place before long-term monitoring projects are initiated.

The data will be analyzed and integrated into predictive ecosystem models. Results will be available to the public through periodic "State of the Gulf" workshops and reports and this will be made accessible on the internet. Workshops and other forums will bring together a variety of participants in the various aspects of GEM to stimulate discussions and spark new ideas.

The Trustee Council is committed to public input and public outreach as vital components of the long-term GEM program. Public meetings, newsletters, annual reports, informational web sites, and the 17-member Public Advisory Group are some of the ways the public is currently informed about restoration activities.

It's envisioned that this effort would continue, but to a lesser degree to reflect the smaller GEM program. The Trustee Council will likely develop a series of alternatives on continuing public advice in the next two years and then go out for public comment before taking any final action.

## B

### **“Gulf Ecosystem Monitoring: A Sentinel Monitoring Program for the Conservation of the Natural Resources of the Northern Gulf of Alaska”**

#### **GEM Science Program NRC Review Draft (April 21, 2000)**

#### **Executive Summary**

This document provides the foundation for the Gulf Ecosystem Monitoring (GEM) program, a long-term research and monitoring effort in the northern Gulf of Alaska. The *Exxon Valdez* Oil Spill Trustee Council (Trustee Council) has endowed this program as a final legacy of its mission to restore the fish and wildlife resources injured by the 1989 *Exxon Valdez* oil spill.

This document is composed of four main sections plus supporting materials:

- Section I describes the Gulf of Alaska (GOA) region and the Trustee Council's program needs at this scale;
  - Section II contains the Trustee Council's vision for meeting these regional needs;
  - Section III is the framework of an institution and process for realizing that vision; •
- Section IV presents and organizes the scientific information available to guide the

Trustee Council as it develops and implements the GEM program. Accordingly, Section IV attempts to be inclusive of all the biological and physical components of the GOA ecosystem.

The GEM document is not itself a research and monitoring plan. Rather, this document provides the overall framework for a program that includes a three-year process of developing, reviewing and adopting a research and monitoring plan. Implementation of the future plan is expected to begin in October 2002.

Within the northern GOA (including Prince William Sound, Cook Inlet, Kodiak Island and the Alaska Peninsula), offshore and nearshore marine, estuarine, freshwater and terrestrial environments interact with geologic, climatic, oceanographic, and biologic processes to produce highly valued natural bounty and exceptional beauty. The GOA provides habitat for diverse and abundant populations of fish and shellfish, marine mammals and seabirds. It is a major source of seafood for the entire nation, as well as for Alaska Natives, who rely on it for subsistence and cultural purposes. It is also a source of beauty and inspiration for those who love nature and part of the “lungs” of the planet for recycling of oxygen and carbon to and from the atmosphere. As a result of both human influences and natural processes, these important attributes are continually changing.

More than half of the state's 621,000 permanent residents live within the geographic area of the northern GOA and the nearby population center of the greater Anchorage area. Most of the more than one-million tourists that travel to the state each year visit this region. The private-sector economy of Alaska depends heavily on extraction of natural resources from this region, including petroleum, fish and shellfish, minerals, and timber. Crude oil and fuel tanker traffic, increasing tourism and recreational use, expanded road building, and growing commercial and sport fishing pressure are all human activities that could affect the marine resources and ecosystem of the northern GOA. In addition, recent evidence of persistent organic pollutants and heavy metals in fish and wildlife tissues in the gulf indicate that this region is not immune from worldwide concerns about potential effects of contaminants on marine organisms and on human consumers, particularly Alaska Native subsistence users.

Populations of important marine resources in the northern GOA have undergone major changes, especially since the late 1970s. Salmon catches of all species, and especially of sockeye, have remained near record levels for two decades, with annual catches significantly greater than those in the three decades ending in 1979. Shrimp and red king crab have fallen to extremely low levels in the gulf since 1980, in sharp contrast to the very high levels in the two prior decades. Kodiak's red king crab fishery, once among the world's richest, has been completely closed since 1984. As shrimp and crab declined, cod, pollock and flatfish, such as arrowtooth flounder, have rapidly increased. Some marine mammals associated with the gulf, such as sea lions, harbor seals and over-wintering fur seals, have steadily declined since 1980. Other species, such as sea otters and elephant seals, have been on the rise for more than a decade. Colonies of seabirds, such as black-legged kittiwakes, common murrelets and cormorants, have shown declines since about 1980 in some coastal localities, such as Prince William Sound and central Cook Inlet, but not in others. Overall, many species and populations associated with nearshore habitats in the GOA have declined since about 1977, whereas species and populations having access to offshore gulf habitats have generally increased.

Understanding the sources of these changes, whether natural or influenced by human activities, requires a solid historical context. This certainly has been the lesson of the 1989 *Exxon Valdez* oil spill, a large-scale ecological disaster, resulting in hundreds of millions of dollars invested in studies and restoration projects in the past decade. Based on the knowledge and experience gained through this program, the Trustee Council has dedicated approximately \$120 million to complete work on lingering oil-spill injury and to endow long-term monitoring and research in the world-renowned ecosystem of the northern GOA.

For planning purposes, the program is referred to as the Gulf Ecosystem Monitoring (GEM) program. The mission of the program is "to sustain a healthy and biologically diverse marine ecosystem in the northern GOA and the human use of the marine resources in that ecosystem through greater understanding of how its productivity is influenced by natural changes and human activities."

GEM has five major programmatic goals. These are to:

DETECT: Serve as a sentinel (early warning) system by detecting annual and long-term changes in the marine ecosystem, from coastal watersheds to the central gulf;

UNDERSTAND: Identify causes of change in the marine ecosystem, including natural variation, human influences, and their interaction;

PREDICT: Develop the capacity to predict the status and trends of natural resources for use by resource managers and consumers;

INFORM: Provide integrated and synthesized information to the public, resource managers, industry and policy makers in order for them to respond to changes in natural resources; and



SOLVE: Develop tools, technologies, and information that can help resource managers and regulators improve management of marine resources and address problems that may arise from human activities.

The annual earnings from a \$120 million endowment will not be able to fund all that needs to be done to achieve the above goals. Instead, the Trustee Council will focus a large part of its efforts on providing leadership in identifying monitoring and research gaps and priorities; encouraging efficiency and integration through leveraging of funds, coordination, and partnerships; and involving stakeholders in local stewardship by having them help guide and carry out parts of the program.

Recognizing that the gulf ecosystem under consideration is extremely complex, consisting of thousands of species, it also will not be possible for GEM to answer all, or even most, of the questions that could be posed about the GOA. GEM instead will be focused, to a large extent, on key species and ecological processes in the system. These will be selected on the basis of ecological importance, human relevance, and their ability to indicate ecosystem disturbance, as well as their importance for understanding the physical and biological bases for productivity. In the end, GEM must be justified on what it can teach policy makers, resource managers and the public about options for directing human behavior toward achieving sustainable resource management goals.

The GEM program will continue to work with resource managers, stakeholders, the scientific community and the public to refine a common set of priorities for research, monitoring and protection in the northern gulf. In order to do that, we must share an understanding of which marine resources of the northern gulf are valued and what stressors or potential threats could affect their overall health. The GEM program will build a matrix of who is monitoring what, where, and when and identify gaps in monitoring those things that are important to us. GEM will work towards filling in the important gaps.

The long-term monitoring element of GEM will be complemented by strategically chosen research projects. These projects will follow up on lingering effects of the *Exxon Valdez* oil spill, explore questions and concerns that arise out of interpretation of the monitoring data, especially in trying to understand the causes of change, and provide key information and tools for management and conservation.

The Trustee Council believes that encouraging local awareness and participation in research and monitoring enhances long-term stewardship of living marine resources. Traditional and local knowledge can provide important observations and insights about changes in the status and health of marine resources and should be incorporated into GEM. Citizen monitoring efforts are already underway in several communities in the GEM region and should be looked to for future collaboration.

Independent peer review of the GEM program is essential for a high-caliber scientific program. Participation in research and monitoring is expected to be completely open to competition. All data must be archived, maintained, and readily accessible to other scientific users and the public. In order for GEM to be successful, it will be necessary to integrate, synthesize, and interpret monitoring and research results to form and present a "big picture" of the status of and trends in the northern GOA ecosystem. Some possible approaches include the use of models, periodic "State of the Gulf" and "State of the North Pacific" workshops and reports, and a GEM website. The Trustee Council is committed to public input and outreach as vital components of the long-term GEM program.

## C

### **Committee Comments on the Scientific Elements Supporting GEM 2000 Program**

In general, the committee attempted to focus its comments on the broad issues for GEM. However, in our deliberations we did at times comment quite specifically on the GEM document, and especially on the scientific framework described in Sections IV.C, D, and Appendix C. Feedback on the scientific framework was requested specifically by the program staff. This appendix provides these more detailed comments and is likely most useful to program staff.

Based on our reading, it appears that GEM program planners see the Pacific Decadal Oscillation (PDO) as the core of the scientific framework, or conceptual foundation, underpinning GEM. This choice is based on recent evidence that the PDO is an important indicator of ecosystem change in the Gulf of Alaska.

However, the committee is concerned that the program's reliance on the PDO concept will prove controversial over time. This emphasis might constrain research and prevent exploration of alternative hypotheses. There also appears to be a disconnection between what appears to be a strong offshore focus and the GEM's broader mission. The mission emphasizes reciprocal links between humans and the marine environment, many of which occur close to shore. If the PDO is maintained as the centerpiece of the plan, GEM should commit to coordinating sampling of biophysical conditions throughout the Northeast Pacific and particularly at offshore fronts because of their proposed importance in transferring production among regions.

The inshore-offshore inverse production regime and linkage to the PDO is not firmly established, and therefore it is not wise to base an entire research program on it. Not only may the hypothesis be incorrect, but it would constrain all research to be centered on a single overarching hypothesis that was not generated by researchers, limiting scientific creativity. Additionally, it is not logical to base the entire GEM program on a hypothesis that centers on offshore fronts. To address the hypothesis that is detailed here, a very large, long-term (50 years at least) offshore monitoring program would be necessary. Not only would the cost of such an immense investigation be beyond the financial capabilities of GEM, but also GEM is a nearshore-based program. That fact conflicts with the ability to address the hypothesis.

In the following sections, we comment first on the explanation of the PDO provided in the GEM document. We then turn to other scientific issues raised in sections IV.C, D, and Appendix C. The eventual conceptual framework developed for GEM will undoubtedly need to be able to incorporate both the PDO and other factors leading to ecosystem change.

#### **THE PDO AS FACT OR HYPOTHESIS?**

The background section (IV.C) and framework section (IV.D) of EVOSTC (2000a) imply a stronger consensus or evidence about the PDO than actually exists. Many marine

scientists agree that the positive PDO (strong low pressure cell over the GOA) is associated with increased algal and zooplankton production in the central Gulf, and this positive PDO has also been correlated with higher salmon production, and possibly lower forage fish production (inshore taxa). However, there is not yet consensus or evidence to explain why production increases offshore, nor if there is an inverse relation with forage fish production onshore (as stated on p. 73, para 3, line 2). There is some evidence that decreased mixed layer thickness can cause an increase in primary production through the alleviation of light-limitation of algae (e.g., Polovina et al. 1995). The GEM document suggests that increased production is mainly due to offshore transport of nutrients because of increased precipitation over land -- essentially, the document hypothesizes that more rain leads to greater runoff, more nutrients, and higher fish production. This hypothesis would require that the circulation of the offshore North Pacific would be enhanced with the increase in the runoff and that additional onshore flow of subsurface waters would accompany the increase in offshore flows at the surface. However, this has not been shown to be the case in this system. With respect to salmon stocks, the model requires that increased primary production result in more zooplankton (which Brodeur et al. 1996 suggest is the case) and that this zooplankton abundance is what regulates salmon production. Unfortunately, data are limited and ideas on these issues are still evolving. Also, Brodeur et al. (1996) only address zooplankton in central (offshelf) Gulf of Alaska. Certainly, there is evidence of higher salmonid escapement during the positive PDO (and higher zooplankton abundance) phases, but the difference in fish production is not necessarily due to having more food. This is a logical and possible scenario, but it could as easily be related to changes in predator abundance as the salmon pass through the nearshore region (if the inverse off-nearshore fish production oscillation is true), changes in survival because of altered salinities, temperatures, or other factors.

The background section links GOA productivity to the shelf-break and oceanographic fronts, but fails to focus on these areas for research and monitoring. The importance of shelf-break areas is suggested on p. 60 (line 33), 64 (line 32), 69 (line 33), 70 (line 19) and 74 (line 40). However, a plan that focuses on the nearshore—as GEM probably will—will not be able to answer many potentially important questions about observed patterns in the GOA. A comprehensive oceanographic program for the Northeast Pacific would be very useful, but this is not GEM's role. New technologies might permit a broad sampling scheme (e.g., remote sensing) and a few well placed moorings might be used. The cross-shelf versus alongshore flux of heat, salt and nutrients needs to be investigated, and process experiments on seasonal time scales with some interdisciplinary modeling might shed light on these questions. The PDO and associated large-scale changes in productivity represent hypotheses, therefore they must be explicitly tested. Within the GEM document, data collection at fronts only appear as a priority in the Appendix of scientific questions.

Section IV D of the GEM document develops a set of specific interrelated physical and biological changes expected to follow from the PDO. These interrelated changes come across as fact, yet the statements on pages 70-73 are mostly hypotheses, which have not been proven.

For instance, regarding the items listed on page 70-71:

- Item 1: There is a very strong seasonal change in the wind stress, but a similar acceleration has not been observed in the Alaska Current or gyre.
- Item 2: The increased wind stress should increase mid-gyre upwelling but not necessarily upwelling to the ocean surface, only into the upper layers.
- Item 3: The interdependence of the Alaska and California Currents has yet to be proven, though satellite altimeter data should provide the evidence if it is true.
- Item 6 suggests an increase in runoff and organic carbon and anthropogenic inputs, which have not been proven or even studied. Prior evidence suggests that runoff here is nutrient limited (Reeburgh and Kipphut, 1986)

Item 10: Where is the evidence for the deepening of the Alaska Coastal Current nearshore? An increase in the ACC transport could be accomplished by increased speed and/or width.

Regarding the items listed on pages 71-73, the committee provides the following comments:

Item 1: The mixed layer depth could be shallower. This shoaling of the mixed layer depth could be caused by increased upwelling rather than warming. Also, changes in salinity of the upper layer salinity can also affect the stratification. Once again, this section gives the impression that much more is known about the physical and biological processes in the Gulf of Alaska than is actually the case. These hypotheses are reasonable but unproven.

Item 5: Organic matter does not originate in the Gulf but rather is transported there by global thermohaline circulation, where it might be upwelled into the upper layers. It is uncertain whether the nutrient-rich water is advected across the shelf in the upper layers or deep layers or whether it downwells more strongly before it reaches the coast.

Item 6: The idea that organic matter downwells on the outer shelf and slope to supply benthic communities is an interesting idea but is unproven.

Item 7: The connection between biooceanographic variables and the abundance and distribution of species on the shelf and slope remains a hypothesis, requiring field study and measurements to prove or disprove it. The plans presented later in the GEM document do not call for such measurements in this region of the gulf.

Finally, the questions in Appendix C, sections c, d, and e appear to be specific to the PDO foundation and therefore may inhibit scientific creativity and progress.

## **PROBLEMS RELATED TO REPRESENTATION OF THE LITERATURE**

As noted earlier, Trustee Council staff said that the committee could be of help both by providing broad, general guidance and by identifying specific problems or errors. In reading the GEM document, the committee identified a number of statements that were insufficiently or incorrectly cited, or that appeared to lack a scientific basis. The following is a list of these issues:

- p. 63, bottom. Concepts attributed to Hollowed and Wooster (1992) and Brodeur et al. (1996) are unlikely to have been stated as interpreted.
  - p. 64, first sentence. Zheng and Kruse is a study of crabs, but the document makes statements about groundfish eggs and larvae.
  - P. 61, paragraph 1 and Figure 8: Brodeur's work did not refer to the PDO. His figures show zooplankton, not plankton in general.
  - P. 71, paragraph 3: the waters of the Alaska Coastal Current are not known to be nutrient limited.
  - Page 61 Line 47: There are insufficient nutrient data to conclude that Gull Island seabird food chains might be supported by "nutrient supply from deep water enabled by exceptionally strong, topographically focused, tidal-induced mixing in lower Cook Inlet.
  - Page 62 line 3: The "continuing increase of average surface-water temperatures in the North Pacific" is not supported by references and may not be valid.
- Page 63 line 4: What is the evidence of movement of the ACC away from the coast?

## **BEYOND THE PDO: COMMENTS ON OTHER PORTIONS OF THE SCIENTIFIC FRAMEWORK**

The inshore/offshore inverse production model is too narrow to provide a conceptual foundation. It could, however, be one hypothesis within a larger framework that seeks to understand spatial and temporal variability and forcing factors (natural/ anthropogenic, top-down/ bottom-up).

Top predators are assumed to act as integrators of environmental factors (especially productivity and stress) and, thus, to be good indicators of change. But this assumption is not supported and leads to some faulty statements. For example, p. 67 states "the rates of recovery of these apex predators from heavy exploitation offer insights into many aspects of the trophic structure." This is a general statement, but it has no meaning without follow up. On p. 67, third paragraph, the document states that "harbor seals should be considered candidates..." However, not only does this concept not belong in that paragraph, there is no explanation to explain why harbor seals should be monitored.

The framework focuses on oceanic and climatic phenomena. This focus is not "wrong," but it ignores nearshore intertidal and subtidal areas that receive some of the most direct human impacts. A tremendous amount of attention was paid to intertidal and shallow subtidal areas after EVOS because much of the oil washed up onshore. Yet the section on benthos includes essentially none of this work. Even if the specifics are too numerous to be included, there are some excellent conceptual foundations that could be employed to focus research. In fact, many of the testable hypotheses about community processes (top-down/bottom-up control, keystone predation, supply side/post-recruitment control, facilitation in stressful environments) were first developed and explored in intertidal systems.

Some impacts from human activity will interact with natural change at the scale of the entire Gulf (for instance, climate warming, persistent organic pollutants, some fisheries). Many, however, are likely to have impacts primarily on near-coastal areas (such as impacts from nutrient loading, aquaculture, forestry, erosion, subsistence harvest, and some fisheries). Currently in the program, marine-terrestrial linkages refer almost exclusively to the transport of marine nutrients upstream by salmon. Clearly there may be many other processes occurring at this ecotone.

The North Pacific Marine Science Program (known as PICES) may provide a good research model for integrating the oceanographic and shoreline components of GEM (<http://pices.ios.bc.ca/>), as may the Partnership for Interdisciplinary Studies of the Coastal Ocean (PISCO). For instance, it is essentially unknown whether recruitment and growth of intertidal and shallow subtidal organisms reflect offshore regime shifts. It is even possible to imagine reciprocal linkages in which nearshore communities affect oceanographic conditions. For instance, nearshore food webs have been shown to have a role in marine productivity. In the Aleutians, the presence or absence of sea otters can alter energy sources and growth rates of intertidal filter feeders through an indirect trophic pathway—mussels consume greater quantities of plankton when otters are rare, and consume more kelp detritus when otters are abundant (Simenstad et al., 1978; Duggins et al., 1989).

In the scientific questions in Appendix C, part b includes specific nearshore locations that are absent from questions in other sections (although PWS, Cook Inlet, and Kodiak shelf must be implied locations for studies of seabirds, some mammals, benthic and intertidal communities). Many anthropogenic impacts disproportionately affect nearshore areas, and important impacts appear to be absent from Appendix C, section f. This section currently includes questions about contaminants. Other human impacts should be considered, including aquaculture, removal of top predators, introduced species and eutrophication.

Finally, as a last variation on the theme of better incorporation of nearshore areas in the scientific framework, the questions on benthic and intertidal communities might be more usefully framed as:

a) What are sources and rates of natural disturbance to these communities, and what are rates and patterns of recovery?

- b) How variable is recruitment in space and time, and among planktonic species?
- c) What is the relationship between recruitment rates and growth rates of filter feeders? Algae? Predators?
- d) What are primary energy and nutrient sources of intertidal and benthic communities-in situ, upwelling, offshore, terrestrial runoff?
- e) Under what conditions are populations limited by recruitment, food, space, natural disturbance, temperature, predators, competitors, disease?

The Trustee Council was impressively far-sighted in setting aside a portion of the settlement from the Exxon Valdez oil spill for long-term research and monitoring in the area affected by the spill. One of the main scientific messages of the spill was that it is difficult to tell whether ecological change has or has not occurred when baseline data are spotty or unavailable (Paine et al. 1996). Clearly, monitoring will improve the capacity to detect future trends and shifts, with the caveat that the changes most likely to be detected are strong ones superimposed on a baseline of low intrinsic or observer-based variability. The deliberate approach to developing the GEM plan, which has included workshops, reports from consultants, and the initial Program development, seems entirely in keeping with the long time frame of the plan.

The program begins to describe environmental science in the Gulf of Alaska in terms of both what is known and how it is being studied. As the summaries of work performed in PWS over the past 10 years are developed, they will contribute to ecological knowledge. Appendix Table 1, which summarizes information-gathering programs in the GOA, is a useful matrix of projects, data collections, and study areas, which can help investigators make connections among disciplines and locations. It may also prove possible to provide links to the data sets that emerge from this variety of projects.

## D

### Biographical Sketches of the Committee's Members

**Michael Roman** (chair) is Professor at Horn Point Environmental Laboratories at the University System of Maryland's Center for Environmental Sciences. His research interests are biological oceanography, zooplankton ecology, food-web dynamics, estuarine and coastal interaction, and the carbon cycle in the ocean. Dr. Roman was chair of the Coastal Ocean Processes (CoOP) Steering Committee for the National Science Foundation and has experience leading a multidisciplinary activity. He brings a broad ecological perspective to this setting.

**Don Bowen** is a research scientist at the Marine Fish division of the Bedford Institute of Oceanography's Department of Fisheries and Oceans. His research has focused on the population dynamics, foraging ecology, and ecological energetics of pinnipeds. Objectives of these studies are twofold: First, to understand the diversity of pinniped life histories and second, to understand the nature of competitive interactions between seals and commercial fisheries. Since 1997, Dr. Bowen has also conducted ecological research on the northern right whale with the aim to foster the recovery of the species.

**Adria A. Elskus** is Assistant Professor of Environmental Physiology at the T.H. Morgan School of Biological Sciences at the University of Kentucky. Her scientific background includes work in endocrinology, geochemistry, biochemistry, and physiology, and she has worked as a consultant in industry (Energy Resources Company), as a toxicologist and chemist in government (US EPA/Narragansett lab), and in academia. Her research interests include the fate and effects of contaminants in aquatic ecosystems, particularly effects on reproduction; adaptation to environmental contaminants; organic pollutant metabolism and the interplay of hormones and pollutants; and the biochemical mechanisms of pollutant effects.

**John J. Goering** is Professor Emeritus and former Associate Director of the Institute of Marine Science, University of Alaska Fairbanks. He is well-known as one of the first to make significant discoveries in the areas of the marine nitrogen cycle, the silicon cycle, and silicon and nitrogen assimilation by phytoplankton. He has served as Vice-President and later President of the Pacific Section of the American Society of Limnology and Oceanography, as chair of the Oil Spill Recovery Institute Science Advisory Committee, and as a member of the North Slope Borough Science Advisory Committee and the Coastal Marine Institute Technical Advisory Committee.

**George Hunt** is Professor of Ocean Ecology and Marine Ornithology at the University of California, Irvine. His research group focuses on the trophic transfer of energy within marine ecosystems, particularly as it pertains to the foraging and reproductive ecology of marine birds. Marine birds provide useful models for investigation of the interactions of physical and biological processes in the ocean that result in concentrations of prey. Colony-based studies of seabird reproductive ecology and food habits are also used as sources of information about the effects of climate change on the structure and functioning of marine ecosystems. In this work, he

emphasizes the importance of physical processes in determining the structure and function of marine ecosystems.

**Seth Macinko** an Assistant Professor in the University of Connecticut's Department of Geography. Previously he was a Social and Economic Policy Analyst at the Alaska Department of Fish and Game. He also fished commercially off Alaska from 1979 to 1983. His research interests are broadly focused on the intersections between natural resource management (especially marine resources), environmental history, and political ecology. He is particularly interested in the role of institutional arrangements and culture in resource management. Current projects are focused on distributional issues involving access to marine resources property rights in marine fisheries, the role of place and community in property right reformations, and linkages between marine resources and community development.

**Donal T. Manahan** is an environmental physiologist from the University of Southern California where he is the Director of the Marine Biology Section in the Department of Biological Sciences. He is active in many areas of science in the Antarctic, as well as in temperate regions and deep-sea hydrothermal vents. His research includes physiological ecology of early stages (larvae) of animal development, animal/chemical interactions in the ocean, and the genetic bases of physiological processes. In education, he is currently the director of an international training course (Ph.D. level) in Antarctica, "Integrative Biology and Adaptation of Antarctic Marine Organisms." Dr. Manahan is the chair of the Polar Research Board and serves as the Board's liaison to this activity.

**Brenda Norcross** is Associate Professor of Fisheries Oceanography at the Institute of Marine Science, University of Alaska, Fairbanks. Her research focuses on fish and their habitats, including human induced effects on the environment. She has studied flatfishes in Alaskan waters, including defining habitats and developing models for nursery areas of five species of flatfishes in Alaskan waters based on depth, sediment type, temperature and other environmental factors. Dr. Norcross also worked on the herring component of the multi-investigator Sound Ecosystem Assessment (SEA) project, which investigated the environment of Prince William Sound following the Exxon Valdez oil spill. She has studied distribution of juvenile fishes and their availability to marine mammals, especially Steller sea lions, and seabirds.

**J. Steven Picou** is a professor of sociology in the Department of Sociology and Anthropology, University of South Alabama. His research interests include technological disasters, community change, and applied sociology. He directed an interdisciplinary team of researchers studying the economic, social, cultural, and psychological impacts of the Exxon Valdez oil spill.

**Thomas C. Royer** holds the Samuel and Fay Slover distinguished chair in Oceanography at Old Dominion University in Norfolk, VA, and is a leading authority on the oceanography of the Gulf of Alaska. His research interests are in deep ocean and coastal hydrography and currents, long-time series measurements, and air-sea interactions. He was at the University of Alaska for several decades, where he was one of the cornerposts of their academic and research programs and where his discovery of a significant coastal current along the coast of Alaska, driven by freshwater discharge, allowed a reasonable prediction of the trajectory of the oil released during the 1989 *Exxon Valdez* oil spill. He represented the University of Alaska Fairbanks in UNOLS for many years and led the UAF ship program. He has a very broad view of marine science, and he has seen extensive service on many panels, boards, and committees.

**Jennifer Ruesink** is Assistant Professor of Zoology at the University of Washington. Her areas of academic interest include community ecology, especially food web interactions; species



invasions; the conservation of biological diversity; and ecosystem functioning. She has studied the ecological impacts of the *Exxon Valdez* oil spill on the ecology of tidal communities in Prince William Sound, including work with NAS member Dr. Robert Paine.

**Karl Turekian**, a member of the National Academy of Sciences, is Silliman Professor of Geology and Geophysics at Yale University. He also is the Director of the Institute of Biospheric Studies and the Director of the Center for the Study of Global Change. His research areas include marine geochemistry, atmospheric geochemistry of cosmogenic, radon daughter and man-made radionuclides, surficial and groundwater geochemistry of radionuclides, planetary degassing, geochronology based on uranium decay chain and radiocarbon of the Pleistocene, osmium isotope geochemistry, meteorite origins in relation to planetary systems, oceanic upwelling, and climate change. Dr. Turekian serves as a member of the Ocean Studies Board and as a member of the Committee on Global Change Research of the National Research Council.