

19.2.14

APPRAISAL REPORT
Shuyak Island
Parcel No. KIB 01
Kodiak Island Borough, Alaska
Contract #53-0109-3-00377
Task Order No. 377-03-A

FOR
U. S. D. A. Forest Service
P. O. Box 21628
Juneau, Alaska 99802

Attn: Mr. Rich Goosens
Contracting Officer's Representative

Report Date
November 21, 1994

Date of Inspection
June 30, 1994

Date of Valuation
September 1, 1994

FILE #11-94-0183

BY
Diane Black-Smith, MAI
Steven E. Carlson, Appraiser

BLACK-SMITH & RICHARDS, INC.
2602 Fairbanks Street
Anchorage, Alaska 99503

RECEIVED

NOV 23 1994

RECEIVED
MAY 19 1995

EXXON VALDEZ OIL SPILL
TRUSTEE COUNCIL
ADMINISTRATIVE RECORD

NOV 27 1994 11:50

Anderson & Associates, Inc.

6780 Oak Bay Road, Port Ludlow, WA 98365
Telephone & Fax: (206) 437-2574

November 25, 1994

Alex Swiderski
Office of the Attorney General
Alaska Department of Law
1031 West 4th Avenue, Suite 200
Anchorage, Alaska 99501

Dear Alex:

Enclosed is my review report for the Shuyak Island timber appraisal submitted by Pacific Forest Consultants, Inc. Gordon Anderson, USFS Review Appraiser, concurs with my findings.

Sincerely,

Anderson & Associates, Inc.



Sheal L. Anderson
President

Enclosure

cc: Dennis Lattery, DNR

Anderson & Associates, Inc.

6780 Oak Bay Road, Port Ludlow, WA 98365

Telephone & Fax: (206) 437-2574

A. Appraisal Review

This report reviews the timber appraisal for Kodiak Island Borough's Shuyak Island property. Pacific Forest Consultants, Inc. (PFC) appraised this timber property at an effective date of September 1, 1994, and submitted their findings on November 16, 1994. Review of this appraisal occurred during November 18 and 19, 1994.

B. Review Process

The extent of this review is limited by the following:

- information contained in the Shuyak Island Timber Appraisal submitted by PFC;
- discussions with PFC's appraiser, Timothy R. Manley;
- site inspection of the subject property;
- independent verification of export log values on or about the appraisal date;
- personal experience and knowledge of domestic and export log markets, as well as logging and related operating conditions in Alaska.

C. Report Completeness

The appraisal report appears complete. All variables relevant to an appraisal of this nature appear to have been considered by PFC in the development of their opinion of value.

D. Adequacy of Data

The primary determinants of timber value are log sales values, harvest costs, and economically harvestable timber volume:

1. Log Sales Values

Overall, the selling values assumed by PFC by individual log sort classification appear reasonable although the average log sales price developed by PFC, as weighted by sort volumes, may be skewed toward an upper range of value. The higher grade sort components reflected in PFC's Final Harvest Plan (FHP) appears high, based on sample cruise results and other information. However, given that the cruise is only an estimate, it is my opinion that the average log sales price determined by PFC is within reasonable limits.

2. Harvesting Costs

Logging, road construction and related costs appear generally reasonable. Although PFC employed a constructed cost approach to estimate these components, my general knowledge of actual contract rates (plus on-site observations related to logging and roading degrees of difficulty) confirmed the reasonableness of these estimates.

3. Harvestable Timber Volume

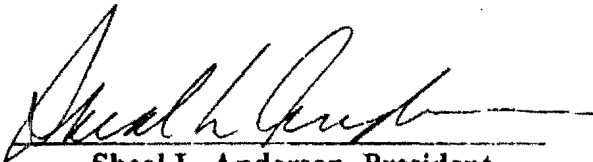
The cruise parameters employed by PFC were designed to estimate "total net volume" on the Shuyak Island tract. These specifications incorporated variable log length cruising to a minimum sample tree with a 12' bole length and a 6" inside bark diameter. This degree of cruise intensity, although maximizing the estimate of physical timber volume, tends to overestimate the actual, economically recoverable volume that would be realized under a typical export logging operation. In general, the value of short, small diameter logs (to the export or domestic markets) is typically not sufficient to warrant their cost of removal. However, PFC's assumption that a reasonable operator would minimize the removal of low value domestic and pulp log volumes does much to minimize the economic effect of this issue.

E. Methodology

In my opinion, PFC has employed an appropriate valuation methodology in appraising the Shuyak Island timber parcel.

F. Report Conclusions

Based on the foregoing, it is my opinion that PFC's appraisal reflects a reasonable estimate of value that would be placed on this timber by the marketplace, given the uncertainties of the export log market, and the limiting assumptions and conditions employed by PFC.



**Sheal L. Anderson, President
Anderson & Associates, Inc.**

November 25, 1994

Anderson & Associates, Inc.

6780 Oak Bay Road, Port Ludlow, WA 98365
Telephone & Fax: (206) 437-2574

SHUYAK ISLAND APPRAISAL REVIEW

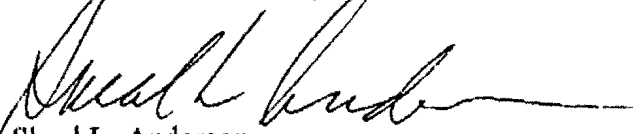
CERTIFICATION

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

- the statements of fact contained in this report are true and correct;
- the reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, 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;
- my compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event;
- I have earlier made a personal inspection of the property that is the subject of this report;
- Gregory Keylock, President, Keylog, Ltd., provided significant professional assistance in developing my review. I also had conversations with Tim Manley, Pacific Forest Consultants, Inc., pertaining to questions on factual data in his original appraisal.

Respectfully submitted,

Anderson & Associates, Inc.



Sheal L. Anderson
President

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES

State of Alaska

DIVISION OF LAND

762-2680

FROM: Dennis L. Lattery
Review Appraiser

TO: Marty Rutherford
Deputy Commissioner

DATE: November 23, 1994

SUBJECT: Appraisal Review - Shuyak Island - Parcel KIB 01 - Kodiak
Island Borough, owner - Black-Smith & Richards,
Appraisers

GENERAL PROJECT DATA

On today's date this office was provided with a one hundred twenty-nine page appraisal report, plus attachments, completed by the firm of Black-Smith & Richards of Anchorage, Alaska. In the attachments is an additional thirty page timber appraisal completed by Pacific Forest Consultants, Inc., a sub-contractor of Black-Smith & Richards.

The purpose of the appraisal is to determine the current market value of 27,900 acres (26,665.62 acres via a draft title report included in the appraisal) of land located totally on Shuyak Island within the Kodiak Island Borough. Legal descriptions of the subject property are too voluminous to include here. Legal descriptions appearing in Appendix A of the appraisal report are assumed to accurately represent the 26,665.62 acres valued in this appraisal.

The owner of record is the Kodiak Island Borough. The interest in this property being valued is the "surface estate".

The function of the report is to determine market value for use in negotiations for purchase of the property by the Exxon Valdez Oil Spill (EVOS) Council.

This appraisal effectively represents two valuation efforts. One determines the value of commercial timber located on approximately 9,680 acres of the property and the other the value of the "surface estate" of the total 26,665.62 acres, considering the 9,680 acres of timberland as being "logged off". Black-Smith & Richards has valued the surface estate and incorporated the timber appraisal information, completed by a timber appraisal subcontractor, Pacific Forest Consultants, into the appraisal. (See comments regarding my competency to review timber appraisals in the following "Review Competency" section.)

Page 2
Appraisal Review - Shuyak Island
November 23, 1994

The following is the FINAL VALUE ESTIMATE appearing at page 80 of the subject appraisal report:

Value Estimate Calculations

Estimated Value of Merchantable Timber	\$24,000,000	
<u>Estimated Value of Cut-over Timberland</u>		
9,680 Ac. @ \$100.00	\$ 968,000	
Estimated Value of Timberlands		\$24,968,000
 Strategic Waterfront Acreage		
0 Ac. @ \$1,120 Ac.	\$0	
Non-Strategic Wtf w/Favorable Topo		
640 Ac. @ \$585	\$ 374,400	
<u>Non-Strategic Wtf w/Unfavorable Topo</u>		
<u>& Backlands</u>		
16,345.62 Ac. @ \$100.00	\$ 1,634,562	
Estimated Value of Land w/o Merchant- able Timber		\$ 2,008,962
 Estimated Value		\$26,976,962
	(rd)	\$27,000,000

REVIEW COMPETENCY

In completing appraisals or appraisal reviews professional appraisers are obliged to disclose that they are competent, or not competent, to complete any given appraisal or appraisal review assignment. If I am competent I am to state reasons why I feel that is the case. If I do not possess a degree of knowledge sufficient to complete an assignment I am to disclose that fact and either decline the assignment, obtain sufficient appraisal training to complete the work or associate with a person possessing the necessary degree of knowledge to complete the project.

I do not possess the expertise to competently review a timber appraisal. As a consequence I have associated with Mr. Sheal Anderson, of Anderson & Associates, Inc., Port Ludlow, Washington, to review the timber valuation portion of this report. Mr. Anderson is currently under contract with the State of Alaska, Office of the Attorney General (AGO), hired in the capacity of a timber expert for purposes of reviewing timber appraisals on behalf of the AGO and DNR. I am relying entirely on Mr. Anderson's expertise in approving the timber value portion of this report. A copy of his

Page 3
Appraisal Review - Shuyak Island
November 23, 1994

review comments are attached to this report. He finds the report technically and professionally supported and he recommends approval of the \$24,000,000.00 timber value.

This reviewer has appraised in the Alaska land market for a period in excess of twenty-five years. I have completed numerous appraisals of both tidelands and uplands in the Kodiak area, most noteworthy being the valuation of large acreage tracts for the proposed ANWAR exchange during the late 1980's. I consider myself qualified to complete this review assignment both in terms of experience and professional appraisal education.

SCOPE OF REVIEW

Per agreed EVOS procedures the agency ultimately to receive management authority over land offered by potential sellers will provide the services of a lead review appraiser. In this instant the Department of Natural Resources is providing the lead reviewer. I acknowledge receipt of review comments from Mr. Richard M. Goossens, USFS, and Mr. Carl Rasmussen, RPRA, of the USF&WS. Comments from both have been discussed and incorporated into this review. Both these reviewers have signed this document indicating concurrence.

This is desk review. This reviewer has not had the opportunity to **specifically** inspect the subject property or the comparable sales included in the valuation. He has, however, been on Shuyak Island on numerous occasions in both a recreational and professional (appraisal) capacity, having spent approximately thirty days on the island; most of that time in the Big Bay vicinity along the subjects west boundary. He is familiar with the recreational opportunities, terrain, general land quality, access and the vagaries of the weather at this location.

In addition, he has at his disposal the complete computerized appraisal and comparable sales files of the Department of Natural resources; this is the undisputed, largest collection of historical appraisal and sales data available in Alaska today.

The following describes specifics considered in the review of this report:

Appraisal No. Shuyak Island Parcel No. KIB 01 (File N. 11-94-0183)

Date of Review November 23, 1994

Legal Description Various-see title report, Appendix A of appraisal report

Page 4
Appraisal Review - Shuyak Island
November 23, 1994

Interest Being Appraised Surface estate - 26,665.62 Acres

Effective Date of Appraisal September 1, 1994

ADL No. N/A

Narrative or Form Appraisal? Narrative

Fair Market Value Or Fair annual rental? FMV (Surface Estate)

The above indicated appraisal has been reviewed. This review has been conducted considering correct mathematics, use of currently acceptable appraisal practices and techniques, adequate market support and sound appraisal logic leading to a convincing conclusion.

Value is predicated on a "market value" basis as defined in the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA) (1992) and as expanded upon in The Uniform Standards of Professional Appraisal Practice (USPAP).

It is required that this report be made in conformity with general requirements of UASFLA and USPAP.

The report under review is subject to adequately addressing and discussing each of the following items:

A) Certification Page?	<u>X</u>
B) Letter of Transmittal?	<u>X</u>
C) Date of Appraisal/Date of Inspection?	<u>X</u>
D) Purpose of Appraisal?	<u>X</u>
E) Rights Appraised? Fee? Leased Fee? Fee less mineral rights? Unless otherwise instructed, all appraisals involving state land will consider valuation on a fee simple less mineral rights basis.	<u>X</u>
F) Highest and Best Use? Provide a discussion of Highest and best use of the subject or subject subdivision, forming the basis for selection of comparable sales data.	
G) Zoning Restrictions and Easements?	<u>X</u>
H) Legal Description(s)?	<u>X</u>
I) Subject Location Map?	<u>X</u>
J) Adequate on-site photographs?	<u>X</u>
K) Subject Plats or Survey?	<u>X</u>
L) Region or Area Data?	<u>X</u>
M) Neighborhood Description? To be included if a specific neighborhood character is evident.	<u>X</u>

- N) Subject Description? Discuss individual subject particulars such as size, quality of access, soils, availability of utilities, topography, water frontage, view, etc. This may be in narrative for individual lots or graphic form (charts) for subdivision appraisals. Regardless of what form is used or where the information is placed in the report, individual descriptions of each property must be included. X
- O) Property Valuation Narrative? Sufficient explanation and market support of value conclusion? Yes
Adjustments fully discussed?
- P) Lease Rate adequately discussed and supported? N/A
- Q) Comparable sales forms, map and photographs included? X
- R) Assumptions and Limiting conditions (optional)? X
- S) Appraisers Qualifications? X

Comments: The report appears to be well organized and supported by appropriate data. The appraiser goes to great lengths to define the parameters of market value, and what the "market" is in this case.

The report furnished on November 23 contains no timber cutting map. The Appraisers have utilized a timber cutting map to determine which areas, after cutting, would be void of timber and, as a consequence, be valued as cut-over or "logged off" land in the appraisal. Also the timber cutting map is used to designate non-strategic waterfront areas for valuation purposes. It is important that this map be included in the report as a visual aid for determining non-strategic waterfront versus logged off (waterfront) land. The appraisers reportedly will provide such a map for the report.

The report furnished on November 23 contains no statement of a ten year sales history of the subject land. The appraisers will reportedly correct this oversight.

It is my opinion that this appraisal report, considering the above comments, and deferring to Mr. Sheal Anderson's expertise with regard to reviewing the timber appraisal, meets UASFLA criteria for an acceptable report. I am led to a reasonable conclusion of value by the appraisers. I recommend approval of the report and the \$27,000,000.00 conclusion of value.

Review Appraiser Certification

Page 6
Appraisal Review - Shuyak Island
November 23, 1994

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

- ___ the facts and data reported by the review appraiser and used in the review process are true and correct.
- ___ the analysis, 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.
- ___ my compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or use of, this review report.
- ___ 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 not personally inspect the subject property of the report under review.
- ___ the assistance of Mr. Sheal Anderson, Mr. Richard M. Goossens and Mr. Carl W. Rasmussen in the preparation of this report is recognized.
- ___ The value determination resulting from this review is \$27,000,000.00, as of (date): September 1, 1994

Dated the 23th day of November, 1994

Dennis L. Lattery
Dennis L. Lattery
Lead Review Appraiser

Concur:

Richard M. Goossens

Carl W. Rasmussen

attachment: Timber Appraisal Review

PART I - INTRODUCTION

APPRAISAL REPORT
Shuyak Island
Parcel No. KIB 01
Kodiak Island Borough, Alaska
Contract #53-0109-3-00377
Task Order No. 377-03-A

FOR
U. S. D. A. Forest Service
P. O. Box 21628
Juneau, Alaska 99802

Attn: Mr. Rich Goosens
Contracting Officer's Representative

Report Date
November 21, 1994

Date of Inspection
June 30, 1994

Date of Valuation
September 1, 1994

FILE #11-94-0183

BY
Diane Black-Smith, MAI
Steven E. Carlson, Appraiser

BLACK-SMITH & RICHARDS, INC.
2602 Fairbanks Street
Anchorage, Alaska 99503

BLACK-SMITH & RICHARDS, INC.

Appraisers
2602 Fairbanks
Anchorage, Alaska 99503
907-274-4654
Fax #907-274-0889

November 21, 1994

U. S. D. A. Forest Service
P. O. Box 21628
Juneau, Alaska 99802

Attn: Mr. Rich Goosens
Contracting Officer's Representative

Re: Shuyak Island
Parcel No. KIB 01
Kodiak Island Borough, Alaska
Contract #53-0109-3-00377
Task Order No. 377-03-A

Dear Mr. Goosens,

In response to your authorization, we have conducted the required investigation, gathered the necessary data, and made certain analyses that has enabled us to form an opinion of the market value of the surface estate of the subject property.

Based on the inspection of the property and the investigation and analyses undertaken, the estimated market value of the surface estate of the subject property, subject to the assumptions and limiting conditions set forth in Addenda of this report, as of September 1, 1994, is:


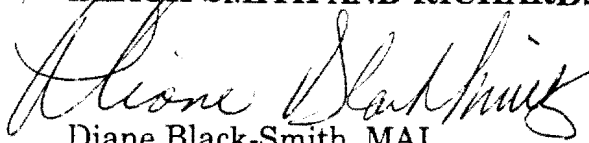
TWENTY SEVEN MILLION DOLLARS
(\$27,000,000)

This narrative appraisal report conforms to the Uniform Standards of Professional Practice (USPAP), the Uniform Appraisal Standards for Federal Land Acquisitions, and the specifications of Contract #53-0109-3-00377 and the specific instructions of Task Order No. 377-03-A.

The report sets forth the identification of the property, the assumptions and limiting conditions, pertinent facts about the area and the subject property, comparable data, the results of the investigations and analyses, and the reasoning leading to the conclusions set forth.

Sincerely,

BLACK-SMITH AND RICHARDS, INC.



Diane Black-Smith, MAI

Steven E. Carlson, Appraiser

TABLE OF CONTENTS

INTRODUCTION

CERTIFICATION	6
SUMMARY OF SALIENT FACTS AND CONCLUSIONS	7
ASSUMPTIONS AND LIMITING CONDITIONS	9
REFERENCES	10

FACTUAL DATA

PURPOSE OF THE APPRAISAL	13
AREA AND LOCAL DATA	25
PROPERTY DATA	29

ANALYSES AND CONCLUSIONS

DATA/TREND ANALYSIS - (MARKET OVERVIEW)	37
THE MARKET FOR SMALL PARCELS (≤ 640 acres - 1 section)	41
THE MARKET FOR LARGE PARCELS (> 640 acres - section)	50
CONCLUSION - MARKET OVERVIEW	60
HIGHEST AND BEST USE	61
CONCLUSION OF HIGHEST AND BEST USE	73
ESTIMATE OF VALUE	74

LAND VALUE ANALYSES

ESTIMATE OF VALUE	81
VALUE ESTIMATE	86
VALUATION - STRATEGIC WATERFRONT SITES	88
EXPLANATION OF ADJUSTMENT PROCESS	94
Correlation of the Key Parcel	101
VALUATION - NON-STRATEGIC WATERFRONT ACREAGE	106
VALUE ESTIMATE -NON-STRATEGIC WATER FRONTAGE FEATURING UNFAVORABLE TOPOGRAPHY	123
SUMMARY OF PER ACRE VALUE INDICATORS	129
TIMBER APPRAISAL	
ESTIMATE OF VALUE	130

COMPARABLE LAND SALES

ADDENDA

Sales Of Large Remote Tracts In Alaska

Mineral Potential Report

Supplemental Comparable Land Sales

Qualificaitons of Appraisers

Underlying Assumptions and Limiting Conditions

CERTIFICATION

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

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the report assumptions and limiting conditions, and are our personal, 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 or bias with respect to the parties involved.

Our compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.

This appraisal assignment was not based on a requested minimum valuation or specific valuation or approval of a loan. Our employment was not conditioned upon the appraisal producing a specific value or a value within a given range.

The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

As of the date of this report I, Diane Black-Smith, MAI, have completed the requirements under the continuing education program of the Appraisal Institute.


Diane Black-Smith, MAI is currently certified by the State of Alaska as a General Real Estate Appraiser (Certificate No. AA 31).

Steve Carlson and Diane Black-Smith have made a personal inspection of the property that is the subject of this report.

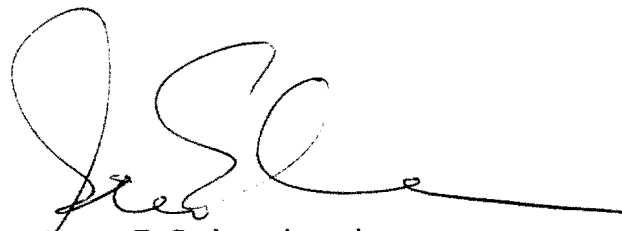
Devery L. Prince provided significant professional assistance to the persons signing this report.

Diane Black-Smith and Steven E. Carlson have the appropriate knowledge and experience necessary to complete this appraisal assignment competently.

Dated this 21st day of November, 1994.



Diane Black-Smith, MAI



Steven E. Carlson, Appraiser

SUMMARY OF SALIENT FACTS AND CONCLUSIONS

Property Appraised

A large tract of remote unimproved land on Shuyak Island. The Island is located within the boundaries of the Kodiak Island Borough in the Gulf of Alaska. The property to be appraised is one of the seventeen parcels selected by the Exxon Valdez Oil Spill Trustee Council as priority parcels to be purchased with the \$900 million settlement.

Legal Description

The legal descriptions are lengthy and presented in the Addenda of the report. The property is identified as KIB01 and inventoried as 27,900 acres in the "Working Document" prepared by the Exxon Valdez Oil Spill Restoration Team Habitat Protection Work Group (November 30, 1993) *Comprehensive Habitat Protection Process: Large Parcel Evaluation & Ranking (Volumes 1. & 2.)*. For the purposes of our analysis, we have relied on the area estimate contained in the legal descriptions summarized in a September 6, 1994 Memorandum (draft) from James McAllister, NRMI (see addenda). Per the descriptions, the subject's acreage is 26,665.62.

We have noted a discrepancy between those legal descriptions and the May 4, 1994 Land Status Map of the Shuyak Archipelago (see Property Identification).

Ostensible Owner

According to the legal descriptions provided, title passed from the Bureau of Land Management to the State of Alaska, and subsequently to the current owner:

KODIAK ISLAND BOROUGH

710 Mill Bay Road

Kodiak, Alaska 99615

Appraisal Purpose

The purpose of this appraisal is to estimate the market value of the surface estate* of the subject properties.

*The surface estate is defined as the fee simple estate less developable minerals. Developable minerals include sand and gravel (Chugach Natives Inc. v. Doyon Inc.) For the purposes of our analysis, we have assumed that the owner of the surface estate can penetrate the subsurface and utilize on-site sand and gravel for foundations and septic systems - incidental non-commercial extractions. THIS IS A SPECIAL ASSUMPTION OF THIS REPORT.

Report Date

November 21, 1994

Date of Inspection

June 30, 1994

Date of Valuation

September 1, 1994

Highest and Best Use

Mixed use including: timber harvest where operations are feasible; private or commercial recreation uses on waterfront acreage where timber harvest is not feasible; speculation for low-utility non-timbered backlands. Special purpose licensing/permitting is practical interim use for timberlands scheduled for later harvest and speculative backlands.

Market Value Estimate

\$27,000,000

ASSUMPTIONS AND LIMITING CONDITIONS

Assumptions and limiting conditions are contained in the addenda of the report.

We have assumed title to be marketable and have relied on the area estimates and legal descriptions provided with the appraisal instructions.

The surface estate is defined as the fee simple estate less developable minerals. Developable minerals include sand and gravel (Chugach Natives Inc. v. Doyon Inc.) For the purposes of our analysis, we have assumed that the owner of the surface estate can penetrate the subsurface and utilize on-site sand and gravel for foundations and septic systems - incidental non-commercial extractions.

The subject properties are appraised as if "contaminant-free".

The timber appraisal prepared by Pacific Forest Consultants, Inc., has undergone an extensive review process prior to its inclusion in our report. We have assumed the appraisal fairly represents the market value of merchantable timber.

A restriction prohibits "heavy industrial uses incompatible with use and enjoyment of adjacent park or public recreation lands" on the west one-half of Section 10, T. 19 S., R. 20. W., S.M. The tract is located on the west side of Shuyak Island fronting on Big Bay, just south of USS 9228.¹ Merchantable timber is identified in this area and its value is included in the overall estimated value of merchantable timber on the subject. We have not been provided with a legal opinion or other interpretation as to the whether timber harvesting qualifies as a "heavy industrial use" that would be incompatible. For the purposes of our analysis, we have assumed this timber can be included in a harvest plan.

¹. Ibid.

REFERENCES

SCOPE

As part of this appraisal, the appraisers made a number of independent investigations and analyses. The investigations undertaken and the major data sources used are summarized as follows:

Conference

Prior to proceeding with work on the appraisal report, we attended a meeting on May 5, 1994. Those attending included:

Alex Swiderski	Department of Law (Alaska)	Asst. Attorney General
Chuck Gilbert	National Park Service (U. S.)	(Realty Officer)
Don Stevens, Ph. D	Stevens Exploration Managment Corp.	(Geologist)
Diane Blacksmith, MAI	Black-Smith and Richards	(Appraiser)
Steve Carlson	Black-Smith and Richards	(Appraiser)
Pat Carlson	Kodiak Island Borough	(Assessor)
Joel Bolger	Jamin, Ebell, Bolger & Gentry	(KIB attorney)
Judy Robinson	Department of Natural Resources (AK)	(Staff Appraiser)
Dennis Lattery	Department of Natural Resources (AK)	(Review Appraiser)
Rich Goossens (conf. call)	U. S. Forest Service	(Contracting Officer)

Regional Data, Market Overview and Neighborhood Analysis.

Various publications, reports, and surveys were reviewed and local industry experts were interview in order to identify significant trends and indicators that affect the area and the subject neighborhood. Publications/reports include: U. S. Bureau of Labor Statistics; *Alaska Economic Trends*; *Alaska Journal of Commerce*; *National Geographic* (November 1993); *Kodiak Alaska 1994 Visitors Guide*; as well as regular newspaper articles and commentaries by local industry experts. Area market data was provided Mr. Pat Carlson, Kodiak Island Borough Assessor; Ms. Bonnie Aulabaugh, Broker Chelsea Realty & Development Inc.; Ms. Sharlene Sullivan, Broker, Associated Island Brokers, Inc.

Description and Analysis

We conducted an aerial inspection of the property on June 30, 1994. We were accompanied by Mr. Pat Carlson, the Assessor for the Kodiak Island Borough (KIB) Assessor, the owner of the subject property. Aerial photos, topographical maps obtained by the U. S. Geological Service, and various maps provided by the land owner were reviewed. We also consulted a "Working Document" entitled *Comprehensive Habitat Protection Process: Large Parcel Evaluation & Ranking (Volumes 1. & 2.)* was prepared by the Exxon Valdez Oil Spill Restoration Team Habitat Protection Work Group (November 30, 1993). Information regarding land use management was provided by Mr. Bud Cassidy, KIB.

Market Data Program - Land

In order to obtain the most recent sales data, we researched the files of the Kodiak Island and Kenai Peninsula Boroughs and reviewed sales reports of the local Multiple Listing Service. Sales data compiled by the U. S. Fish and Wildlife Service, the State Department of Natural Resources, and the Bureau of Land Management was also reviewed and analyzed. In addition, we spoke with several real estate professionals including real estate broker's/agents and other appraiser's. Transactions were confirmed primarily by telephone interviews with knowledgeable parties - buyers, sellers, agents, assessors, appraisers, etc. Data sheets are contained in the addenda.

Mineral Resources

We have relied on a special report, prepared by Donald L. Stevens, Ph. D. of Stevens Exploration Management Corporation. The summary of the report is included in the Addenda.

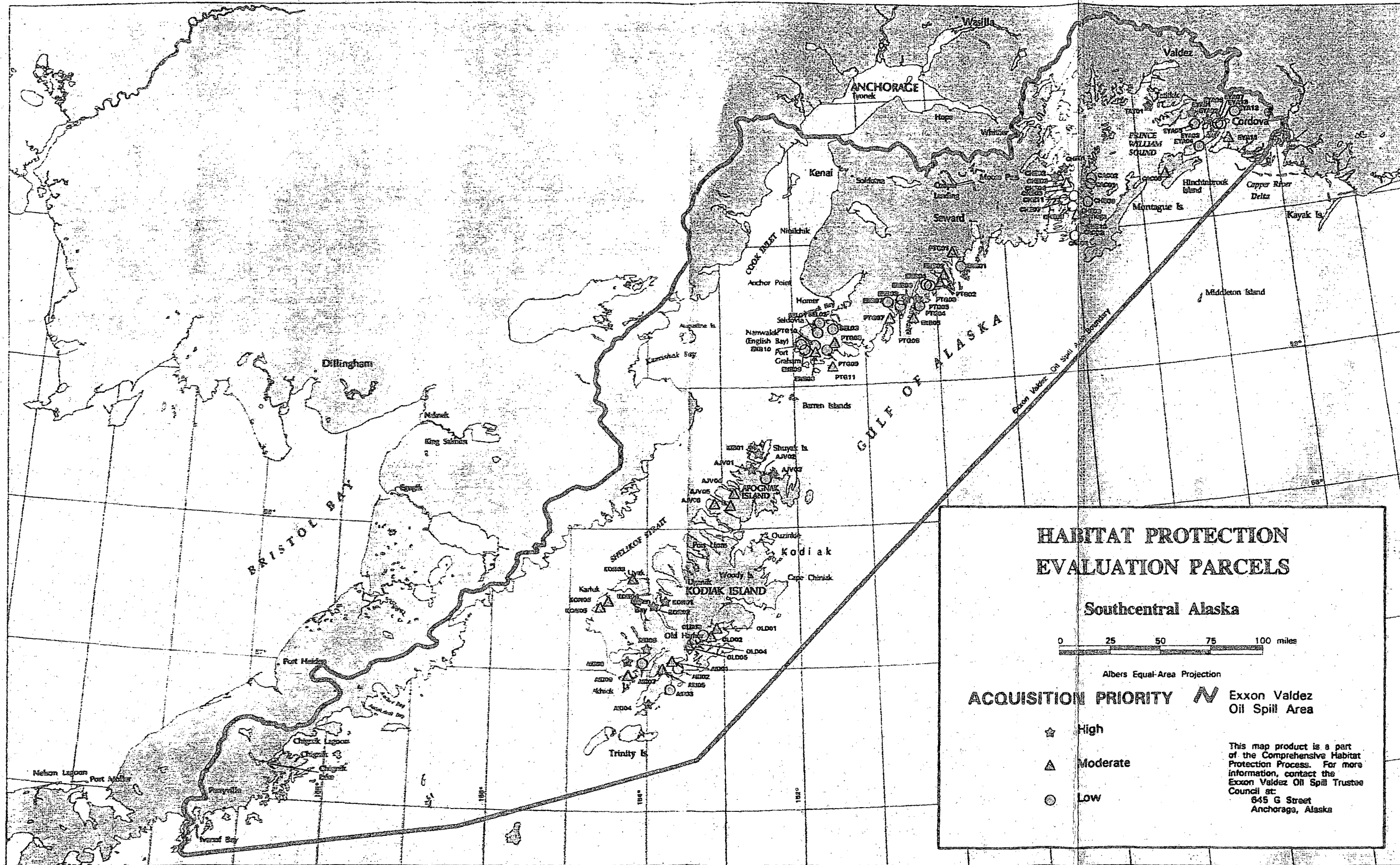
Timber Resources

The timber appraisal prepared by Pacific Forest Consultants, Inc., estimated the present value of the subject's merchantable timber, as of September 1, 1994. The report is self-contained in a tabbed section of our report. The report has been subjected to an extensive review process prior to its inclusion in our report and we have relied on its conclusion.

Availability of Information

All information requested was provided.

PART II - FACTUAL DATA



PURPOSE OF THE APPRAISAL

The purpose of this appraisal is to estimate the market value of the surface estate* of the subject properties.

*The surface estate is defined as the fee simple estate less developable minerals. Developable minerals include sand and gravel (Chugach Natives Inc. v. Doyon Inc.) For the purposes of our analysis, we have assumed that the owner of the surface estate can penetrate the subsurface and utilize on-site sand and gravel for foundations and septic systems - incidental non-commercial extractions. THIS IS A SPECIAL ASSUMPTION OF THIS REPORT.

VALUE DEFINITION

The Uniform Appraisal Standards for Federal Land Acquisitions (1992) defines "fair market value" as;

"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."

IDENTIFICATION OF THE PROPERTY

Property Appraised

A large tract of remote unimproved land on Shuyak Island. The Island is located within the boundaries of the Kodiak Island Borough in the Gulf of Alaska. The property to be appraised is one of the seventeen parcels selected by the Exxon Valdez Oil Spill Trustee Council as priority parcels to be purchased with the \$900 million settlement.

Ostensible Owner

According to the legal descriptions provided, title passed from the Bureau of Land Management to the State of Alaska, and subsequently to the current owner:

*KODIAK ISLAND BOROUGH
710 Mill Bay Road
Kodiak, Alaska 99615*

Legal Description

The legal descriptions are lengthy and presented in the Addenda of the report. The property is identified as KIB01 and inventoried as 27,900 acres in the "Working Document" prepared by the Exxon Valdez Oil Spill Restoration Team Habitat Protection Work Group (November 30, 1993) *Comprehensive Habitat Protection Process: Large Parcel Evaluation & Ranking (Volumes 1. & 2.)*.

Note: In early June 1994, we noted a discrepancy between the legal descriptions provided and the May 4, 1994 Land Status Map of the Shuyak Archipelago (see Property Identification). The discrepancy is noted in the following comparative tables:

Acreage by printed legal description

USS 1738		9.30 ac.	
USS 9221		31.96 ac.	AA-7069 # C
USS 9226	L 1 & 2	39.92 ac.	AA-7069 # B
USS 9228		<u>20.00</u> ac.	AA-7069 # D
		101.18 ac.	
<u>Lands within</u>			
T18S R19W)		
T18S R20W)		
T19S R19W)		
T19S R20W)		
T20S R20W)	<u>26,564.44</u> ac.	
Total Acreage		26,665.62 ac.	

Acreage by 5/4/94 "Land Status" map

KIB & Native Allotment Selections	85 ac.
Kodiak Island Borough (KIB)	<u>26,492</u> ac.
	26,577.00 ac.

Attempting to reconcile the differences, we noted that USS 1738 may be the source of the discrepancy. This parcel is drawn in but not color-coded as a native allotment selection. In an October 17, 1994 memorandum, Mr. Bruce M. Bothelho, noted minor changes in an updated title report. However, the total acreage estimate is unchanged and the discrepancy appears to be unresolved. For the purposes of our analysis, we have relied on the area estimate contained in the legal descriptions summarized in a September 6, 1994 Memorandum (draft title report) from James McAllister, NRMI (see addenda). Per the descriptions, the subject's acreage is 26,665.62.



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking northerly at southern tip of subject



Looking northerly at Daylight Harbor on southern coast of subject



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking northerly at Port Williams on southern coast of Shuyak Island



Looking westerly out Shuyak Strait to Shelikof Strait - Port Lawrence is on the right



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking northerly along west side of Shuyak Island. Cape Newland on left



Looking south @ southwest corner of subject and Cape Newland



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking south @ southwest corner of subject over Neketa Bay

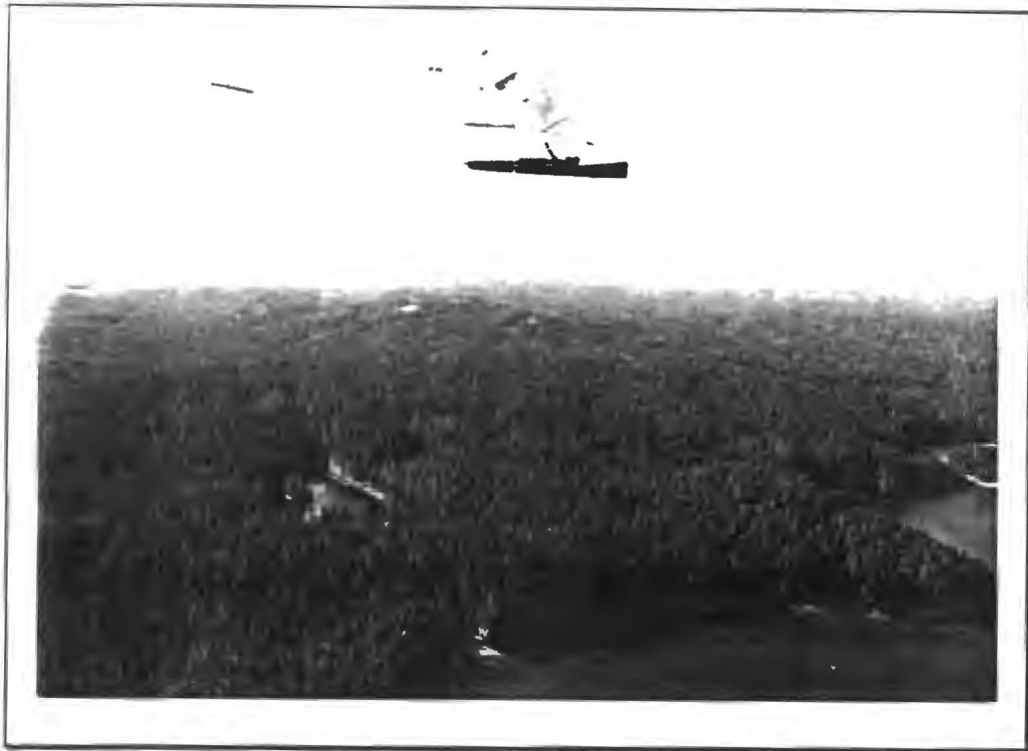


Looking southeasterly inland from Big Bay



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking southeasterly inland from Big Bay



Looking east across northern portion of subject. Carry Inlet appears in left center.



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking south from northwest corner of subject. Shangin Bay appears in left center.



Looking southerly toward head of Shangin Bay from north boundary of subject



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking southwest across Shangin Bay from northeast corner of subject.



Looking west across northern portion of subject from the northeast corner.



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking west from approximate mid-point of subject's eastern boundary.



Looking west from eastern boundary at Big Fort Channel.



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking northeast across subject from southeast corner



Looking northeast from southern boundary of subject. Shangin Bay appears in distance.



6-30-94 (SEC)

SUBJECT PHOTOGRAPHS



Looking south across Shuyak Lake. Afognak Island appears in background



Looking northwest over Shuyak Lake. toward Big Bay

AREA AND LOCAL DATA

Alaska

State spending of the oil revenues has been the driving force behind economic growth in Alaska. It has been said that oil revenues fund 80% to 85% of the state's annual operating budget. Between 1980 and 1986, the state distributed \$26 billion for operations, capital projects, and permanent fund appropriations.

A subsequent dramatic decline in oil prices brought about a severe economic recession that impacted nearly every community in Alaska. The recession was characterized by substantial losses of population and construction activity virtually came to a halt. Personal and business bankruptcies were commonplace and several banks failed. Real estate markets for nearly every type of property were depressed.

The overall economy is generally considered to have stabilized by 1990 but remains dependent on the petroleum industry and vulnerable to unexpected changes in wellhead prices and the projected decline in Prudhoe Bay production.

General Neighborhood - Kodiak Island Borough

The general neighborhood is entirely contained within the boundaries of the Kodiak Island Borough. The city of Kodiak is located approximately 250 miles southwest of Anchorage - Alaska's largest city and the hub of the state's economic activity. Anchorage is the business, government, transportation, education and cultural core of Alaska.

The Kodiak Island Borough includes several islands in an archipelago that parallels the southeast coast of the Alaska Peninsula - separated from the Katmai National Park and Preserve by the Shelikof Strait. The northeast end of the archipelago is referenced by the Barren Islands and the southwest end by the Trinity Islands. Kodiak Island is the largest island and its largest city (Kodiak) is the seat of the Borough government.

The Borough boundaries encompass approximately 17,800 miles and the population as of July 1, 1993 was estimated at 15,245.² The city of Kodiak is home to nearly one-half of the Borough's population. The populations of recognized as second class cities are reported in the following table. All are located on Kodiak Island.

Akhiok	78
Larsen Bay	144
Old Harbor	307
Ouzinkie	210
Port Lions	259

The area is further profiled by the State of Alaska Department of Community & Regional Affairs as follows:

"The Island culture is grounded in commercial and subsistence fishing activities and is primarily non-Native. 16% of the population are Natives. A Russian Orthodox Church seminary is based in Kodiak, one of the two existing seminaries of this kind in the U. S. The Coast Guard comprises a significant portion of the Borough."

"The Coast Guard, local, state, and other federal agencies provide employment opportunities. Fishing, fish processing and support services are the key employers; Kodiak is (the) second highest port in the nation for seafood volume. Subsistence activities are prevalent."

"Kodiak is accessible by air and sea. A paved state-run airport, gravel municipal airport, and float plane facility at Lily Lake serve air traffic. The Alaska marine Highway System operates a ferry service from Seward and Homer. Two boat harbors serve commercial and transient vessels. Approximately 140 miles of state roads connect island communities on the east side of the island."

"January temperatures range from 14 to 46; July temperatures vary from 39 to 76. Average annual precipitation is 54.5 inches."

Most of the region is remote and undeveloped. The topography is diverse ranging from coastal wetlands to mountainous terrain. Much of uplands in the northern end of the archipelago are heavily forested with merchantable timber. Uplands in the southern end consist of grasslands punctuated by alder thickets.

². "1994 Community/Borough Map", State of Alaska Department of Community and Regional Affairs.

Major land owners include the Federal and State governments and native corporations including Koniag Inc., the regional corporation. The Kodiak National Wildlife Refuge encompasses 1,865,000 acres³ - approximately two-thirds of Kodiak Island's 3,620 square-miles.⁴ More recently, an increasing supply in the face of limited demand suggests that no upward pressure on values should be anticipated for an extended term.

Historically, the area has been primarily used for subsistence related activities and commercial fishing. "Fishing drives the economy: The salmon harvest brings fishermen more than 40 million dollars a year, the deepwater trawlers' catch of pollock and cod nearly and equal amount in recent years."⁵ "The City of Kodiak is home to the nation's second largest commercial fishing port, as measured by quantity of fish caught."⁶

Both private and commercial recreational use has been on the upswing. The area offers spectacular scenery and represents prime habitat for many species of land and sea mammals, birds, and both fresh and saltwater fishes. The islands boast world class salmon fishing, a large deer population, and world record class brown bear. In addition to being a frequent destination of sportfishermen and hunters, the archipelago has become increasingly popular with ocean-kayakers, hikers, and photographers. "Its a land of stark and spellbinding contrasts, ranging from coastal wetlands and meadows to glacial valleys, alpine lakes, and ice-sculpted 4,000-foot mountains. Fingers of the sea reach in, so that nowhere on Kodiak can you stand and be more than 15 miles from salt water".⁷

3. Department of Interior, U. S. Fish and Wildlife Service

4. John L. Eliot, "KODIAK: Alaska's Island Refuge", *National Geographic* Vol. 184, No. 5 (Nov. 1993) 38.

5. Ibid. 46

6. Ibid. 45

7. Ibid. 38

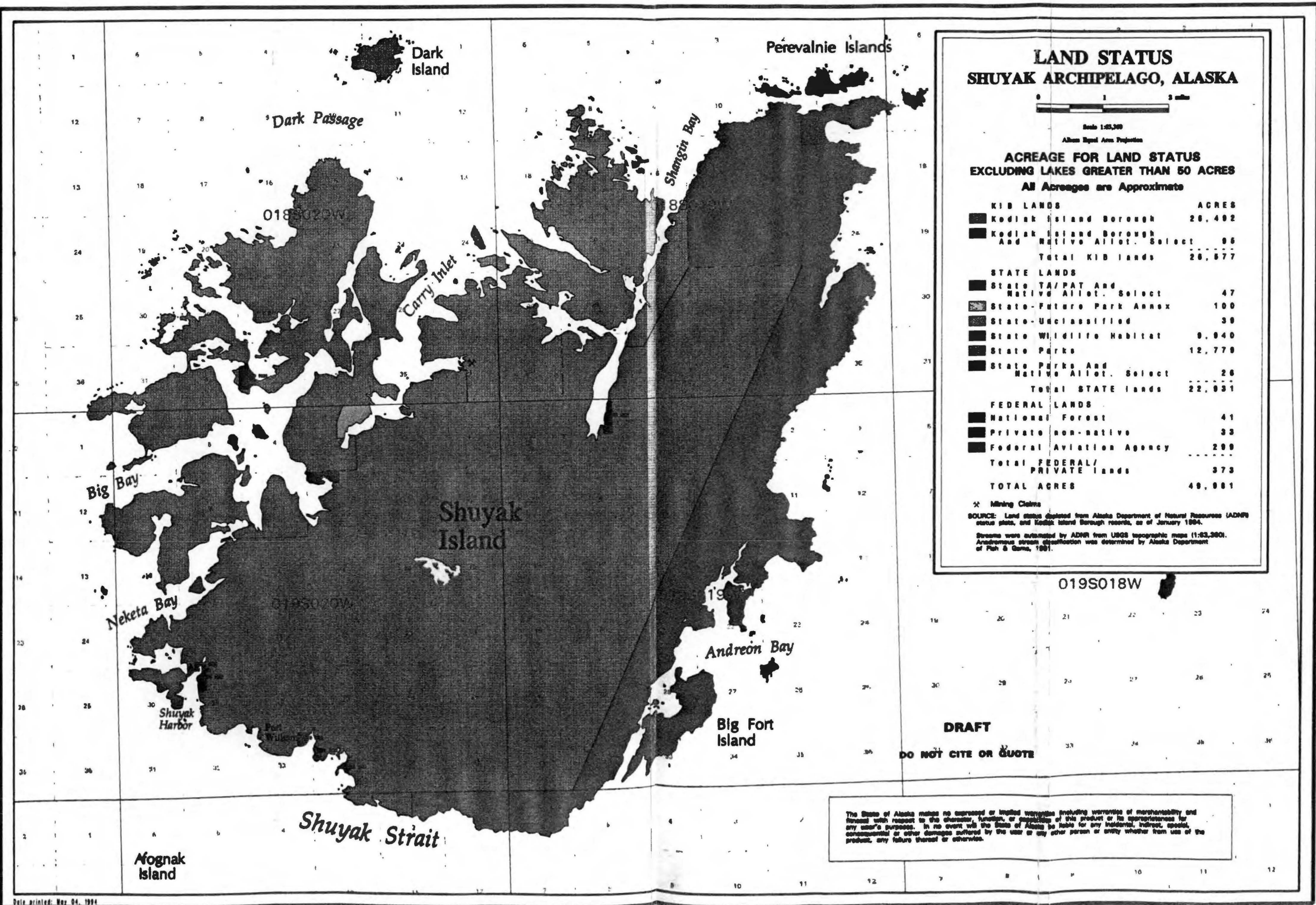
Immediate Neighborhood - Shuyak Island

Shuyak Island is located near the northwest end of the Kodiak archipelago just off the northern tip of Afognak Island. The separation of Shuyak and Afognak Islands by the Shuyak Strait is only one third of a mile at its narrowest point. Total acreage of Shuyak Island, including smaller outer islands, is approximately 50,000 - nearly all of which is in some form of public ownership. Private non-native land totals only 33 acres and the total of native allotment selections is approximately 111 acres. The subject property, owned by the Kodiak Island Borough, accounts for 26,666 acres - slightly more than half of the total. Nearly 23,000 acres are designated as State parkland or wildlife habitat.

The area is characterized as a rugged coastal environment with a jagged shoreline punctuated by numerous bays, coves, and lagoons. Select areas, particularly on the western inland waterway, offer protected moorage and gravel/sand beaches. Elevations range from coastal lowlands to approximately 660 feet. Much of Shuyak island, including most of the subject property is heavily forested with merchantable Sitka Spruce.

There are no significant lakes or rivers identified by name on the U. S. G. S topographical maps. Small freshwater lakes and streams provide rearing habitat for anadromous species and the island supports a healthy population of transplanted Sitka Black-Tail deer. Brown Bear, the big game species for which the Kodiak Archipelago is world famous, also inhabit the island but populations on Shuyak are less dense than elsewhere in the Archipelago. Fur animals include river otters and fox. Marine mammals include seals, seal lions, sea otters, porpoises and whales. Other saltwater species include shrimp, crab, herring, cod, halibut, and rockfish. Bald eagles and several species of seabirds inhabit the area.

As a destination, the area is generally perceived as "exotic" in terms of its remoteness and the relative quality of outdoor experiences. Increasing awareness of the area's recreational opportunities will likely result in increasing commercial opportunities. At the same time, the subject is well-suited for public use. However, the remote characteristic and often-harsh weather conditions, contribute to costly and potentially unreliable transportation. Too many, these are limiting factors that tend to dilute the practicality of this destination.



PROPERTY DATA

Location

The subject property is located on Shuyak Island, a remote island near the northwest end of the Kodiak archipelago just off the northern tip of Afognak Island. The Island is located within the boundaries of the Kodiak Island Borough in the Gulf of Alaska, approximately 200 miles southwest of Anchorage. The subject property is located adjacent to the Kodiak and Alaska Maritime National Wildlife Refuges.

Area

The property is one of the seventeen parcels selected by the Exxon Valdez Oil Spill Trustee Council as priority parcels to be purchased with the \$900 million settlement. The property is identified as KIB01 and inventoried as 27,900 acres in the "Working Document" prepared by the Exxon Valdez Oil Spill Restoration Team Habitat Protection Work Group (November 30, 1993) *Comprehensive Habitat Protection Process: Large Parcel Evaluation & Ranking (Volumes 1. & 2.)*.

For the purposes of our analysis, the area estimate is based on the legal descriptions provided. Per those descriptions, the subject's acreage is 26,665.62. A general description of the acreage is summarized in the following table.

USS 1738		9.30	acres	
USS 9221		31.96	acres	BLM # AA-7069 Parcel C
USS 9226	Lots 1 & 2	39.92	acres	BLM # AA-7069 Parcel B
USS 9228		20.00	acres	BLM # AA-7069 Parcel D
<u>Lands within</u>				
T18S R19W	}			
T18S R20W	}			
T19S R19W	}			
T19S R20W	}			
T20S R20W	}	26,564.44	acres	(lengthy legal in Addenda)
Total Acreage		26,665.62	acres	

The area estimates are assumed to reflect BLM determination standards - net of navigable rivers/streams over "3 chains" in width and submerged lands in excess of 50 acres. Ownership extends to the mean high-water line.

Given the size of the subject, variations in physical features and characteristics can be expected. A general description of the subject property is summarized in the following paragraphs.

Geography, Soils, Topography

Shuyak Island represents a rugged coastal environment with several protected bays and inlets that offer safe anchorages and floatplane landing sites. The subject property features an extensive shoreline. Shorelines range from sand/gravel beaches to abrupt rock-walls. However, along most of the subject's waterfrontage, the 100 foot contour (elevation) is set back a sufficient distance that moderately sloping topography is indicated (U. S. G. S topographical maps).

Soils generally consist of a thin layer of organics over a base of bedrock. The uplands are inundated with numerous pothole lakes and heavily forested with merchantable timber. The largest lake, situated in a central location, is approximately 3/4 of a mile long. "Little is known about the island's interior as it is thickly forested and because most activity occurs along the coasts."⁸ Backland elevations rise to approximately 660 feet.

Natural Resources

The subject features a substantial timber resource (Sitka Spruce) that is quantified and valued in a report prepared by Pacific Forest Consultants Inc.

According to a "Mineral Potential Report" prepared by Mr. Donald L. Stevens, Ph. D. of Stevens Exploration Management Corporation (Anchorage); "The mineral potential and previously claimed mineral occurrences do not appear to have any significant market value." "The probability of discovery of any significant mineral occurrence is so low that there is no negative impact on the value of the surface estate." There is no market value for any undiscovered mineral resource.

⁸. "Acquisition of Kodiak Island Borough Lands on Shuyak Island & Raspberry Island", an informational summary prepared by the Resource Management Office, Office of the Borough Mayor, Kodiak Island Borough, October 1993.

Wildlife Resources

The subject property and the surrounding lands and waters are home to significant species of wildlife (see: "*Habitat Protection Parcel Analysis*" in the Addenda). Big game animals include brown bear and deer. Fur animals include river otters and fox. Marine mammals include seals, seal lions, sea otters, porpoises and whales. Bald eagles and several species of seabirds inhabit the area. Six Pink Salmon spawning streams are document on the subject property. Healthy populations of Dolly Varden Trout documented in eight streams. Anadromous streams are also reported to support runs of Coho and Chum Salmon. Saltwater species include shrimp, crab, herring, cod, halibut, and rockfish.

Cultural Resouces

The "*Habitat Protection Parcel Analysis*" (see Addenda) reports 15 documented sites as "cultural resources". Specific sites have not been identified to the appraisers. The significance of these sites with regard to market value is discussed in the Highest and Best Use Analysis.

Access

There is no road access to the subject parcels. Primary access is by marine transport and floatplane. Three public easements assure legal overland access across State land from the Gulf of Alaska. However, the easements are unimproved. The easements are described as; "... public use easements for the benefit of KIB and the public, each of which shall be 200 feet in width, to provided public access from the line of mean high tide westeraly to lands on Shuyak Island ...".⁹

Utilities

There are no public utilities in the area.

⁹. Kodiak Island Borough (Appellant) vs. State of Alaska, Department of Natural Resources (Appellee), *AGREEMENT OF SETTLEMENT and CONSENT DECREE*. 5.

Zoning

The subject is zoned "C-Conservation District". The "...District is established for the purpose of maintaining open space areas while providing for single-family residential, and limited commercial land uses." Regulations permit most of the probable uses of the subject. In addition several possible uses "... may be allowed by obtaining a conditional use permit...". A listing of Permitted Uses and Restrictions is presented in the Addenda. The "C-Conservation District" classification is not considered to adversely impact the utilization of the subject parcel, nor select areas/sites within its boundaries, to its/their Highest and Best Use(s).

Coastal Management Plan

In 1984, the State of Alaska approved the Kodiak Island Borough's coastal management program (plan). According to Linda Freed, the Borough's Planning Director, the "plan" is somewhat vague and currently in the process of a rewrite. The function of the plan is regulatory and the revision will be more specific with regard to performance standards and guidelines. However, the plan's purpose is "guidance" that is more likely to place conditions on a proposed project rather than result in denial.

The revised plan may or may not provide additional regulatory constraints for specific development projects - particularly those that require more than a local land use permit. Uses requiring the filling-in of wetlands, large-scale sanitary land fills, logging transfer stations, are examples of projects that would typically require a higher level of review. Logging operations have been established in the northern part of the Kodiak Archipelago for several years. In summary, the Coastal Management Plan is not considered to adversely impact the utilization of the subject properties, nor select sites within their boundaries, to their Highest and Best Uses.

Restrictions

A restriction prohibits “heavy industrial uses incompatible with use and enjoyment of adjacent park or public recreation lands” on the west one-half of Section 10, T. 19 S., R. 20. W., S.M. The tract is located on the west side of Shuyak Island fronting on Big Bay, just south of USS 9228.¹⁰

Easements

According to the title report provided; “Section line easements would have been automatically established for all surveyed sections under AS 19.10.010.” A private easement described as a 100 foot wide right-of-way for a water pipeline and storage reservoir reported affects 6.4 acres in Sections 28 & 33, T. 19 S., R. 20 W., Seward Meridian.

Leases, Permits, Licenses

According to Mr. Pat Carlson, Kodiak Island Borough Assessor, the property is not subject to any significant leases, permits, or licenses. Per Mr. Carlson, the Department of Fish and Game pays a nominal \$1 per year for use of a site within the boundaries of USS 1738. The agreement is reported to be cancelable and of no significance.

Other Rights, Title, Interest

A Certificate for “water rights & access” have been issued to a private party for four small lakes at Port Williams in Section 33, T. 19 S., R. 20 W., Seward Meridian.

Real Estate Taxes

The subject parcel lies within the boundaries of the Kodiak Island Borough. If privately owned, the parcel would be subject to annual real estate taxes. State law requires that properties be assessed at 100% of market value. The 1994 mill rate applicable to the subject is 6.75. According to Mr. Pat Carlson, the Borough assessor, natural resources are not subject to taxation.

¹⁰. Ibid.

Environmental Issues

Drifting slicks, resulting from the March 24, 1989 event known as the Exxon Valdez Oil Spill (EVOS), contacted some of Kodiak Island's shoreline. According to maps obtained from the State of Alaska Department of Natural Resources, "oiling" occurred only in an isolated area - Shuyak Harbor at the southwest end of the island. Along approximately 1/4 mile of shoreline on the west side of the harbor, "light" oiling (1% to 10% coverage) was documented. A small area at the north end of this section of shoreline received "moderate" oiling (10% to 50% coverage). On the opposite side of the harbor, "very light" coverage (<1%) and "light" coverage (1% to 10%) was documented in a couple in a couple of random locations.¹¹

Although no evidence of the spill was noted during our aerial inspection, varying degrees of "persistence" may affect some of this shoreline. The impact of the spill on non-oiled areas, more than five years after the spill, is the subject of on-going debate. The appraisers are not qualified to evaluate the arguments and arrive at a conclusion. The subject properties are appraised as if "contaminant-free".

Suitability of the Subject

The subject is a large tract consisting of varied terrain, features and characteristics. Select areas within the boundaries of the subject may be well suited for private or commercial recreation. And, areas within the subject's boundaries feature a substantial timber resource.

The subject is also well-suited for public use. The subject is rated in a "Working Document" prepared by the Exxon Valdez Oil Spill Restoration Team Habitat Protection Work Group (November 30, 1993) *Comprehensive Habitat Protection Process: Large Parcel Evaluation & Ranking (Volumes 1. & 2.)*. The "document" evaluates parcels identified within the oil spill area in terms of "CRITERIA FOR RATING BENEFIT OF PARCEL TO INJURED RESOURCES/SERVICES". Ratings of "high", "moderate", or "low" are assigned to the following injured resource/service:

11. Alaska Department of Natural Resources, Land Records Information Section, Map Production: UTM Zone 5.

Pink Salmon	Bald Eagle	Harlequin Duck	Recreation/Tourism
Sockeye Salmon	Black Oystercatcher	Inter/subtidal Biota	Wilderness
Cutthroat Trout	Common Murre	Harbor Seal	Cultural Resources
Dolly Varden	Marbled Murrelet	River Otter	Subsistence
Pacific Herring	Pigeon Guillemot	Sea Otter	

The resource and service ratings were weighed with other evaluation criteria to derive a "score" (see: "*Habitat Protection Parcel Analysis*" in the Addenda). Observed breaks in the distribution of scores translated into three "ranks" - "high"; "moderate"; "low". "This ranking represents the degree to which protection of a parcel will benefit the recovery of linked resources and services that occur on that parcel." The subject is ranked "high".

It should be noted that these rankings reflect only the relationships of the identified parcels to each other - based on a specific evaluation process in which non-economic "criteria" is given most weight. The rankings are not meaningful to other parcels outside the oil spill area, some of which may deserve even higher rankings in relation to the parcels identified. Furthermore, the rankings should not be construed as a reflection of the overall market position of the identified parcels in relation to each other.

PART III - ANALYSES AND CONCLUSIONS

DATA/TREND ANALYSIS - (MARKET OVERVIEW)

The purpose of the Market Overview is to identify the market(s) within which the subject would be traded and determine its/their adequacy. An "adequate" market for purposes of estimating market value is one characterized by numerous sellers exposing alternative choices to the market and numerous buyers driving values. The findings of the Market Overview become the basis for the Highest and Best Use Analysis, the cornerstone of the economic concept of market value.

The ownership of Alaska lands has changed dramatically in recent years. Historically, Alaska has had the smallest percentage of privately owned land of any state. Land trickled into private ownership in the form of mining claims (brought to patent), federal homestead programs and early Native allotments. In addition, some random squatters, lessees, and permit holders were given the opportunity to acquire fee title. After statehood (1959), several land disposal programs accounted for the transfer of additional acreage from state to private ownership. The largest transition from public to private ownership was effected by the 1971 Alaska Native Claims Settlement Act (ANCSA). The Act established regional and village corporations as the basis for land selections totaling approximately 44 million acres.

Recently, the flow of land from public to private ownership from two major sources has stopped. The federal homestead act was repealed in 1976. Other federal land disposal programs were terminated by 1986 and are not expected to be resumed. State land disposal programs were interrupted in 1991 by a moratorium resulting from on-going litigation in the complex matter of the Mental Health Trust. Nevertheless, as a result of these programs, settlements, etc., the amount of remote and rural land in private ownership has increased dramatically so that the supply of land in most areas exceeds demand. Routine turnover of existing patented parcels sufficiently re-supplies the inventory so that there are usually numerous alternatives available at any given time for the majority of prospective purchasers. This contention is supported by the market exposure periods reported for confirmed sales and a survey of available listings and their reported market exposure periods to date.

The supply of competing inventory can be expected to further increase in the foreseeable future. According to Mr. Dick Larson, an appraiser with the Bureau of Indian Affairs, native allotment selections yet to be patented potentially amount to several thousand acres in various Alaskan locales. Also, while many Native corporations have preferred to retain ownership of their land assets, they are potential sources of large inventories of privately-owned land. Not all are on equal financial footing and some may realize the need to generate cash through land sales. Others may choose to distribute some of their land to shareholders. For example, in 1984, the Ninilchik Native Association conveyed approximately 8,000 acres in the form of 15 to 40 acre (approximately) parcels to 206 individual members. The lands are located approximately 13 miles east of Ninilchik in the uplands at the base of the Kenai Mountains. Oilwell Road accesses the general area. Kenai Peninsula Borough records indicate there have been a handful of resales in recent years.

The land trust established for the University of Alaska in 1915 and 1929, was formerly managed by the State. The Trust is now managed by the University of Alaska State Office of Land Management with the intent of maximizing the economic benefits of its assets in order to contribute to the cost of the university system. According to administrator Mr. Martin Epstein, the Trust holds fee simple title to 136,659 acres in random locations across the state. The trust also owns the surface rights on an additional 17,655 acres. In the region generally described as the Gulf of Alaska, the Trust owns the timber rights on 37,777 acres. Legislation is currently pending that would allow the Trust to select an additional 500,000 acres. Timberlands are reportedly preferred.

The issue of land claims by the Mental Health Lands Trust is expected to be resolved in the foreseeable future. The settlement will result in additional competing inventory in excess of one million acres. The State is expected to reinstate their land disposal programs once the issue of the Mental Health Lands Trust is resolved. Although not marketed, lands conveyed to borough and municipal governments represent yet another source. Borough governments have had several land auctions in recent years.

As a footnote, it is interesting to note that while the supply of land in private ownership increased, the amount of land designated for public use, preservation,

and conservation has also increased. "Alaska has 55 million acres of national parks. That is 70 percent of the entire national park system. We have 75 million acres of national wildlife refuges. That is 85 percent of the national wildlife refuge system. We have 58 million acres of wilderness lands in Alaska. That is 91 percent of all the wilderness in parks and 97 percent of all the wilderness in refuges."¹²

In summary, based on this general overview, it is not unreasonable to conclude, that:

- the perception of Alaska as having an inadequate supply of land in private ownership is outdated;
- Alaska has a disproportionate amount of land in protected/preserved status.

The remainder of the Market Overview is devoted to identifying, defining, and qualifying appropriate markets.

Kodiak Island Archipelago is a limited access region of south-central Alaska. The Archipelago is prime habitat for many species of land and sea mammals, birds, and both fresh and saltwater fishes. Historically, the area has been primarily used for subsistence related activities. Other uses include both private and commercial recreation, and commercial-industrial uses such as fishing, cannery operation, livestock ranching, and timber harvesting. Given the diversification of these activities and the variety of topographical/physical features and characteristics typical of large scale tracts, it is likely that the different Highest and Best Uses will be appropriate for select areas within the boundaries of the subject tract(s). However, a single Highest and Best Use for the entire acreage may be a supportable conclusion.

For the purposes of our analysis, the overview of Alaskan markets for remote land is divided into two discussions. In the first, the market(s) for small parcels is analyzed. The second evaluates the market for large parcels.

¹². Senator Ted Stevens R-Alaska, speaking on the floor of the Senate on June 30, 1993 preceding the vote confirming George Frampton as assistant secretary of Interior for Fish, Wildlife and Parks. Excerpts from Stevens remarks were printed in an *Anchorage Daily News* article entitled "Frank words for newest Interior official" (7/6/93) B5.

An "adequate" market for purposes of estimating market value is one characterized by numerous sellers exposing alternative choices to the market and numerous buyers driving values. "The premise that the parties have a choice of alternative sites underlies the principle of substitution - a cornerstone of appraisal methods."¹³ As part of the process of qualifying the adequacy of these markets, we will survey the market exposure periods of reported sales and listings (to date) where data is available. The market exposure period is defined as: "The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; a retrospective estimate based upon an analysis of past events assuming a competitive and open market."¹⁴

The overall concept of reasonable exposure encompasses not only adequate, sufficient and reasonable time but also adequate, sufficient and reasonable effort. A marketing period of one year is not an unreasonable expectation for properties that are professionally marketed (reasonably consistent efforts) and priced to reflect current market conditions.

The marketing period that may be necessary to sell a property is an important consideration. For example, if a marketing period of more than one year is reasonably probable and no upward pressure on values is anticipated due to a large inventory of competing properties, the value conclusion would represent a future value that would have to be discounted to reflect a present value. Obviously, the reliability of the value estimates decreases with longer projections of marketing periods.

A characteristic of a free and open market (competing buyers and sellers), is that optimistic asking prices eventually must adjust to the market if a sale is to occur within a reasonable marketing period. The most common listing changes reported in the weekly bulletins of the Anchorage Multiple Listing Service are price reductions.

¹³. Micheal Robbins, PhD, "The Valuation of Large Scale Natural Landscapes Using Contemporary Appraisal Theory," *The Appraisal Journal* (April 1987) 225-244.

¹⁴. Appraisal Standards Board Statement 6 and Advisory Opinion G-7.

THE MARKET FOR SMALL PARCELS (≤640 acres - 1 section)

The market for small parcels includes several submarkets referenced by common land uses. Submarkets are identified and analyzed in the following subsections.

Private Recreation

General

The market is most active for sites featuring water frontage. The most common denominations of acreage range from one to ten acres. Per acre prices generally range from a few hundred to several thousand dollars. Subdividing is usually not a near-term disposition of small recreation sites and the sales are perhaps best evaluated by some other unit of comparison such as the price per site or the price-per-front foot (water frontage).

Not all properties are sold through real estate brokers and not all brokers in south-central Alaska belong to shared-listing services. However, the Anchorage Multiple Listing Service (MLS) is considered to provide a representative sample of the market exposure periods that precede the sale of remote waterfront properties. Anchorage residents probably represent the largest pool of prospective purchasers for remote recreational properties. The market exposure periods preceding several recent sales are indicated in the following table.

Waterfront	Acres	List \$	Sales \$	%	\$/Acre	Date	Mkt Exp.
Chandalar Lake	5.02	\$49,500	\$45,000	91%	\$8,964	4/10/91	148 days
Holitna River	40	\$50,000	\$50,000	100%	\$1,250	8/5/93	12 days
Holitna River	60	\$80,000	\$57,938	72%	\$966	9/7/93	131 days
Shungnak River	40	\$80,000	\$50,000	63%	\$1,250	4/21/93	525 days
Lake Iliamna	1	\$35,000	\$24,000	69%	\$24,000	8/26/91	71 days
Lake Iliamna	80	\$75,000	\$70,000	93%	\$875	7/23/91	241 days
Lake Iliamna	12.22	\$200,000	\$192,000	96%	\$15,712	7/24/91	8 days
Ugashik Lake,	40	\$220,000	\$60,000	27%	\$1,500	9/19/91	354 days
Naknek River	5	\$150,000	\$105,000	70%	\$21,000	2/6/92	647 days
Uyak Bay, Kodiak	8	\$45,000	\$41,000	91%	\$5,125	7/9/91	121 days

The average indicated market period for these 10 sales is 226 days. However, it should be noted that the data reflects sales over a period of nearly three years. Based on this observation and the current inventory of properties in the same locales (approximately 40), there is an excess supply of available inventory.

This contention is supported by the high ratio of listings that did not sell during this same time period. MLS Statistics compiled for the remote district 106 for 1991, 1992 and 1993 are summarized in the following table (includes both waterfront and non-waterfront properties).

	<u>1991</u>		<u>1992</u>		<u>1993</u>	
Total Listings	203	100%	100	100%	87	100%
Sold	9	4%	3	3%	5	6%
Pending at Year's End	0	0%	2	2%	2	2%
Not Sold or Pending	194	96%	95	95%	80	92%
% of Listed Price	76%		71%		90%	

The data suggests that demand for remote recreational properties appears to be extremely limited and lengthy market times should be expected. Upward pressure on land values is unlikely in the foreseeable future. For the ten sales summarized, the selling prices averaged only 77% of the listed prices.

Specific "micro-markets" indicate that previously sold waterfront recreation sites routinely re-supply the inventory to the extent that supply continues to exceed demand. In late 1993, seven waterfront sites were available in the Keyes Point development on Lake Clark. Lake Clark is located on the west side of the Alaska Range and accessed only by airplane. Keyes Point was the most elaborate remote recreational subdivision ever undertaken in Alaska. The project is surrounded by the Lake Clark National Park and Preserve and features a good quality gravel airstrip and gravel roads. Approximately 260 2-to-2.5 acre lots were created in the mid 80's and initial sales activity was brisk. Approximately 72% of the lots were reportedly sold in less than four years. No re-sales of Keyes Point lots have been reported in the Anchorage MLS in 1991, 1992, or 1993. Individual listings of the seven lots all had expired by the end of March (1994) after market exposure periods ranging from approximately 200 to 1,300 days.

In Prince William Sound, a similar phenomenon is evidenced. A mining claim on Latouche Island in Prince William Sound was perceived by a developer as a rare subdivision opportunity. Privately owned land in the region was almost non-existent and the perception of scarcity piqued initial demand. When the Latouche Island lots were first offered in the late 1970s, sales were brisk. According to Laurie Shafer, one of the developers of Addition #1, approximately 100 of 187 lots were sold in the first 72 hours of an offering in April of 1979. At the time the Latouche Island project was undertaken, it represented the only source of private recreation lots in the Sound. However, purchases were speculative for the most part. Ms. Shafer reported that although some purchasers were generally familiar with the area, nearly every lot was selected from a plat and purchased site unseen. Only two year-round residences and four cabins are reported to have been constructed since the first phase of the project in 1976 - eighteen years ago. In a 1980 offering, sales were not nearly so rapid and substantial inventories remain. Forty-four unsold lots belonging to Ms. Shafer (mostly non-waterfront) have been marketed by Marston Real Estate (Anchorage/Wasilla) for over two years without a sale. During this time, previously sold lots have been offered by various other brokers, none of which reported any sales activity.

General characteristics of the private recreational site sub-market are summarized as follows:

- The most significant characteristic of remote recreational properties is "water frontage". Market prospects for lots removed from the waterfront are poor. The reasonableness of this observation is supported by historic/traditional land uses of Alaskan Natives. With rare exception, natives have selected their individual entitlements (allotments) on the ocean, a lake, or a river/stream.
- Market prospects become progressively more limited as distance from major population centers increases - particularly when formidable geographic obstacles and adverse weather conditions combine to complicate access by air and water.

- Typically, the best lots are the first to sell and when offered for resale, they tend to compete with the unsold inventory. The current supply/inventory of remote recreational sites throughout Alaska, generally exceeds demand to the point that little, if any, appreciation in values is anticipated. Such market conditions tend to negatively impact values of bulk acreage and deter developers.
- For many remote recreation subdivisions, little to no down payment installment sales are necessary to attract buyers and high default/foreclosure rates are the norm.

Kodiak

The subject property is located in the Kodiak Island Archipelago southwest of Anchorage. The Archipelago is a limited access coastal environment. Access to the City of Kodiak is by air or marine transport. Roads extend only a short distance from the city so that the majority of the Archipelago is remote.

The overwhelming majority of the Archipelago's acreage is owned by government entities and native corporations. Government land owners include the United States, the State of Alaska, and the Kodiak Island Borough. Corporate owners include the Koniag (Native) Regional Corporation and several village corporations including Akhiok-Kaguyak, and Old Harbor. For the most part, these corporations have retained ownership.

A limited supply of privately owned land has been available in the form of patented mining claims, cannery sites, homesteads, and Native Allotments. However, according to Mr. Pat Carlson, KIB Assessor, subdividing activity has been minimal in recent years. Only three remote parcels have been subdivided since 1987 - creating less than 25 lots generally ranging in size from 5 to 10 acres in size. The "Reed" homestead near the Village Islands on Uganik Bay was subdivided in two phases in 1987 and 1988. Twelve 10-acre parcels and one 40-acre parcel were created. A 20-acre "sailor" allotment at Port O'Brien on the Northeast Arm of Uganik Bay was subdivided into four 5-acre lots (approximately) in 1988. The KIB subdivided a parcel on Onion Bay in 1990. Five 5-acre lots (reported average) were sold in a sealed bid process to 4

individual purchasers. Per Mr. Carlson, three of the five lots were purchased by commercial "set-netters" and two were purchased for recreational use.

The apparent lack of activity may be partially attributed to a lack of available tracts in suitable locations. However, numerous Native Allotments (typically 160 acres +/-) have been in private ownership in random locations throughout the Archipelago - many in locations well suited for subdividing. Sales logged by the KIB Assessor suggest that demand for remote recreational sites is soft. Annual absorption of small parcels ranging in size from 5 to 20 acres is summarized as follows:

Year	# of Sales
1987	2
1988	13
1989	5
1990	4
1991	5
1992	7
1993	5
average annual absorption over the past seven years (small parcels ranging in size from approximately 5 to 20 acres)	6 (rd)
average annual absorption over the past five years (small parcels ranging in size from approximately 5 to 20 acres)	5 (rd)

We spoke with the area's two largest brokerage firms - Chelsea Realty & Development, Inc. and Associated Island Brokers Inc. As of May 1994, over 35 small parcels, ranging in size from approximately 5 to 20 acres, were offered for sale by two brokerages. Agents from both companies confirmed that the market for remote private recreational sites in the archipelago is characterized by limited demand and a more-than-adequate supply. In the mid-80s, the Larsen Bay Tribal Council distributed a large number of small parcels (10 acres +/-) in the general vicinity of Uyak Bay to individual shareholders. At any given time several are available and the general trend in recent years has been toward declining values. It should be noted that many of these parcels are unsurveyed and there is a question as to the clarity of their titles.

Both brokerages concurred that the Highest and Best Use for most remote sites is "recreation" but logistics are a limiting factor. As a result, it is somewhat isolated from a large pool of prospective purchasers - approximately 350,000 Southcentral Alaska residents served by the State highway system. For owners of light planes, over-the-water air routes and weather conditions that are often adverse, combine to discourage frequent visits. Remote private recreation sites in the Archipelago are likely to be perceived as "practical" to a relatively small pool of prospective buyers comprised mainly of island residents.

In conclusion, the market for small parcel recreational sites (5 to 20 acres) in the Archipelago is perceived to be limited but adequate for purposes of estimating market value. As parcel size increases, market activity decreases to the extent that the amount of data is insufficient and an expanded data search is necessary.

Commercial Recreation Sites

Commercial recreation uses include lodges, campgrounds and camper parks. There are no roads in the area surrounding the subject and as such no commercial opportunities that rely on vehicle access. In remote areas, lodge operations are the most probable commercial recreation use.

Lodge operations require a substantial investment in start-up costs and F F & E in addition to the site and improvements. Business failures are common and several lodges are usually for sale at any given time. However, the tourism industry in Alaska has experienced growth in recent years and the potential for further growth and increased opportunities is generally perceived as "good". In spite of the high failure rate of remote lodges, a few sites have recently been acquired for commercial recreation development.

Some lodge operations can be accommodated on sites containing five to ten acres. Larger parcels acquired for lodge operations range from 80 to 160 acres. The data suggests that an entrepreneur would likely budget for an adequate site on a cost per site basis rather than a cost per acre. Upper-end values generally range from \$100,000 to \$200,000.

On one hand, the supply of suitable lodge sites throughout Alaska may be perceived as more than adequate. Obviously, sites made strategic by

location/access and the abundance of wildlife resources were the most likely to be previously claimed, settled, or otherwise utilized and already in private ownership. Arguably, most of the best commercially viable sites have long been taken/occupied. On the other hand, trends in the visitor/recreation industry signal an emerging marketplace for non-consumptive formats such as sightseeing/photography, hiking, kayaking, etc., - and possible gambling operations.

However, based on a review of recent sales data and input from knowledgeable real estate professionals, demand for strategic commercial recreation sites appears to be limited and only those sites that are truly unique are likely to attract an entrepreneur within a reasonable marketing period. As with the Kodiak Archipelago market for small parcel recreational sites (5 to 20 acres), the local market for small sites suitable for commercial recreation is considered to be adequate for purposes of estimating market value. Again, as parcel size increases, market activity decreases to the extent that the amount of data is insufficient and an expanded data search is necessary.

Public Recreation Sites

Sites that are well-suited for a commercial operation or a recreational subdivision are often also well-suited for public recreation (i.e. campgrounds, waysides, boatlandings, etc.) use. Numerous waysides, campgrounds, RV parks and boat launching facilities, are located throughout Alaska.

The Federal government normally develops and maintains public recreation facilities on land it already owns - usually with a National Park, Refuge or Wilderness. Although the State of Alaska owns millions of acres, it is the most likely purchaser of strategic public recreation sites. We spoke with Mr. Wyn Menefee with the State Division of Parks regarding the process by which potential acquisitions are identified and funded. Per Mr. Menefee, a strategic parcel may be targeted by extreme public pressure. Also, land management plans may authorize acquisitions such as inholdings within State parks. During the oil boom years when the State coffers were flush with cash, acquisitions were routine. However, in recent years funding has not been available. Per Mr. Menefee, budgets are simply too tight to even prioritize a wish list. Mr. Dave Stevens, Chief of Policy and Planning for the Division of Parks, indicated that

returning strategic private lands to public ownership is no longer a priority due largely to the lack of funding but also due to the vast amounts of acreage in Alaska that are already reserved or under some form of protection.

An occasional funding source for a super-strategic site is the exception. For example, the State Department of Fish and Game, operating independently of the Division of Parks, acquired the site of the old Sportsman's Lodge on the Kenai River at its confluence with the Russian River. The site was purchased to create parking and a public boat launch facility. Nearly all of the funds were provided by a Federal program and the State's participatory contribution was minor. In summary, demand by public agencies is extremely limited and as a sub-market, it is inadequate for purposes of estimating market value.

Rural Residential

There is a limited market for relatively small parcels that have been created as the result of dividing a section into homestead size parcels of 160 acres and subsequently halving or quartering them. Forty acres is one of the most commonly observed sizes of semi-remote rural properties in the Matanuska-Susitna Valley and on the Kenai Peninsula. Although there have been several recent market transactions in these locales, there is a dramatic oversupply that is expected to continue to deter subdividers for an extended term.

Where lots are truly remote, demand for homesites is not measurable. Numerous remote recreational lots, both waterfront and non-waterfront, are available and would be suitable for rural residents. Ms. Laurie Shafer, a developer of 227 on Latouche Island in Prince William Sound (currently owns 44 unsold lots), reported that only two year-round residences have been constructed on the 227 lots since the mid-70s. One of those is vacant. In summary, the market for remote residential sites is extremely limited and values are most likely to be reflected by an analysis of remote private recreation sites.

Marine-Commercial

Only a handful of on-shore processing operations can be supported by the area's resources. In most locales, an adequate number has been secured for several years. Likewise, the number of small set-net sites is perceived to be adequate because there is a fixed number of permit holders. Pioneering efforts in oyster

farming in other regions suggest a mariculture industry is evolving. Although initial indicators are promising, the potential is speculative and the economic feasibility has not yet been determined. However, even if mariculture proves successful, on-shore sites are generally not required and increased demand is not anticipated at this time. In summary, demand for marine-commercial uses is extremely limited.

Summary

There is an active but limited market for small parcels in most Alaskan locales. Supply typically exceeds demand so that no upward pressures on values should be anticipated in the foreseeable future. The majority of the data reflects purchases of waterfront sites for recreation use. For small denominations of 5 to 20 acres, local markets like the Kodiak Archipelago may be adequate for purposes of estimating market value. However, the data indicates that market activity decreases as site/parcel size increases. According to KIB records, only four parcels in the Archipelago exceeding 100 acres in size have been sold in recent years (excluding the Seal Bay/Tonki Cape acquisition by the Trustee Council). One was acquired for a commercial-recreation operation, another was acquired by the U. S. Fish and Wildlife, and the other two were assembled for the establishment of a religious colony/community. For larger denominations, the local market is inadequate and an expanded data search is necessary.

THE MARKET FOR LARGE PARCELS (>640 acres - section)

The overwhelming majority of the State of Alaska is comprised of remote land to which access is limited. For the purposes of our report, wildlands, preservation and conservation lands, and wilderness will be collectively referred to as "natural lands". Generally speaking, the terms imply large scale tracts of acreage and we have focused on these in our discussion. Acquisitions of relatively small parcels for related uses will be considered in our analysis where appropriate.

"Government on all levels and even private individual donors are heavily involved in the purchase (often repurchase) of lands to add to the public domain, reclaiming the wilderness wherever it can be found."¹⁵ There have been several such acquisitions in Alaska in recent years. However, because there are not numerous buyers for large tracts of natural lands and typically there are few, if any, alternative choices for the specific properties selected for acquisition, the adequacy of the "market" is suspect. "Adequacy" must be qualified in terms of supply, demand, and the adequacy of the existing data.

The wild and scenic aspects of the subject property and its surroundings are truly spectacular. The appraisers recognize the compelling impulse to prefer that it remain in its natural state. However, there are already vast expanses of classified lands in Alaska reserved in the public's interest. For much of the rest of Alaska, remoteness, volatile markets for natural resources, combine to effectively preserve unclassified natural lands. Mining and timber harvesting threaten to alter landscapes and disturb the sensitive environments of only a minute percentage of Alaska's natural lands. The riparian habitat along rivers and streams is protected by legislation that prohibits logging within buffer zones. Discharges by industry are regulated in an effort to maintain water quality. Some operations including select timber companies and the Usibelli coal mine at Healy voluntarily re-seed or otherwise restore the landscape.

15. Kenneth L. Golub, MAI, "Appraising the Wilderness", *The Appraisal Journal* (July 1980) 361-365.

Acquisitions intended to protect/preserve/conserve may represent unnecessary measures that only duplicate the effect of regulations already in effect. The maintenance of satisfactory populations of virtually every significant fish and game species in Alaska is addressed by regulations of public agencies such as the U. S. Fish and Wildlife Service, the Alaska Department of Fish and Game, etc.,

In summary, there is a large and disproportionate supply of Alaska's land already reserved in the public's interest. If legitimate demand for additional non-specific large tracts were to emerge, holdings of various native corporations, state and local governments, the University of Alaska and Mental Health Land Trusts, would comprise a substantial inventory of competing property. The contention of excess supply of natural lands in Alaska is supported by an investigation of demand. The likely prospects for large tracts containing tens of thousands of acres include the state and federal governments, private preservation/conservation groups, and private individual donors. However, this already limited pool of purchasers is significantly reduced when the willingness and ability of each buyer is considered.

Private Conservation Groups

There are numerous private conservation groups and organizations that seek to protect and preserve natural environments. The Nature Conservancy and the Trust for Public Lands are two of the more well-known agencies and have been involved in Alaskan acquisitions in years past.

We spoke with the Seattle office of the Trust For Public Lands. The Trust is a 20 year-old non-profit organization that assists government agencies or citizen advocacy groups in locating money for the acquisition of land for outdoor recreation. Market value is the basis for their acquisitions. Mr. Peter Scholes, a director of the Trust's northwest region, indicated the Trust typically pursues "politically popular inholding acquisitions" and has been involved in three projects in Alaska. However, the Trust does not have the capability to hold and manage property over the long term. Rather, the Trust serves as more of a facilitator or broker. Currently, the Trust holds title to the oil and gas rights under 68,000 acres on the Alaska Peninsula. The oil and gas rights were previously owned by Koniag Inc. and are reported to have only a nominal speculative value. Ownership is expected to ultimately flow through to the U. S.

Fish and Wildlife Service. Per Mr. Scholes, the Trust is not involved in any projects related to the Exxon Valdez Oil Spill.

The Nature Conservancy is a national non-profit organization that is dedicated to preserving habitat, particularly for endangered and threatened species. The Nature Conservancy has, at times, sought to acquire, hold, and manage habitat as an option to management by a government agency. However, according to Steve Planchon, the Conservancy's local director, with the exception of an occasional donation, there are no targeted acquisitions in Alaska at this time - for several reasons including an acknowledgement of the quantity of wildlife habitat already under some form of protection. In Alaska the Conservancy is active in several projects in which it serves primarily as a consultant providing technical expertise, or as a broker/facilitator. For example, the Conservancy took title and held for an interim period of approximately one year, the Seal Bay acquisition by the State of Alaska that was to be funded by Exxon Valdez Oil Spill settlement funds.

In late 1993, the Conservation Fund attempted to acquire a 575-acre site that straddles the mouth of the Ayakulik River on the west coast of Kodiak Island. To our knowledge, the site represents crucial habitat for only sockeye salmon and feeding brown bears - both closely monitored and regulated. The acquisition of the site is probably not necessary to maintain satisfactory populations. However, the site is unusually strategic in that it assures a degree of control over entry and use of contiguous backlands. Only similar "big-bang-for-the-buck" acquisitions are likely.

That Alaska already has substantial amounts of land in reserved or protected status is a recurring acknowledgment. This recognition undoubtedly prompts these organizations to direct their efforts where they are needed most - in select areas of the continental U. S. For example, although, Ducks Unlimited had previously undertaken projects in Alaska, all their efforts are now focused on areas outside of Alaska where wetland habitat is rapidly disappearing. Alaska has literally millions of acres of waterfowl breeding habitat. Of Alaska's 174 million acres of wetlands, approximately 115 million are owned by the Federal Government, 40 million by the State, and 19 million by Native corporations. Less than 200,000 (approximately 1/10th of one percent) are in private non-

native ownership.¹⁶ Obviously, the vast majority of these wetlands are not expected to be threatened for an extended term.

In summary, private conservation groups are not considered to be prospective purchasers of large tracts of Alaska's natural lands. In Alaska, they typically act as brokers or facilitators that serve as a conduit for stepped transfers of title that may be required by unique circumstances.

Individual Buyers/Donors

Individuals may be willing and able to commit personal resources to conservation. However, often the motive is more than good will and the purchase/donation is personally advantageous. For example, a party with the means could secure a large parcel to create a private retreat and subsequently receive favorable tax treatment for the donation of surplus land surrounding a core parcel retained for personal use.

Nevertheless, for whatever motive, "market" value must be the basis of the donation. Most of these transactions have occurred in the continental United States where market value is determined by a variety of economically supportable uses including timber, grazing, or approaching commercial and residential development. Again, Alaska is truly unique. With the exception of commercial stands of timber in select areas, most of Alaska's remote natural lands are not well-suited for uses that commonly represent the basis (Highest and Best Use) for land valuation in other regional markets. If such donations continue to receive favorable treatment, an increasing pool of prospective buyers/donors may result. However, at this time any increase in demand for Alaska's natural lands from individuals is not evidenced by the data.

Timber Industry

There is an active timber industry in southeast, southcentral, and the Gulf Coast regions of Alaska. It is a volatile industry characterized by fluctuating markets and challenges by environmental groups. Nevertheless, the industry is established and there is a demonstrable demand for product. For properties with merchantable timber, eventual harvest is the most probable use.

16. "Navigable Waters And Wetlands", Spring Seminar sponsored by the Anchorage Sourdough Chapter 49 of the International Right of Way Association, Anch., Ak (4/21/94).

State of Alaska

The State of Alaska already owns vast amounts of natural lands but various agencies may be authorized to acquire certain types of properties. However, except for an occasional source of funding, the State does not have the ability to purchase small inholdings within state parks, let alone entire parks themselves.

In response to a bill that would create a 45,000 acre state park on Afognak Island, Sen. Robin Taylor, R-Wrangell added amendments that would remove approximately 60,000 acres from state parklands in the form of 15 small coastal parks in southeast Alaska and Prince William Sound. "The problem is we can't even afford to empty the garbage cans in the parks we've got,". Earlier this year, the State announced plans to close 18 roadside park units because of a budget crunch.¹⁷ By increasing the staff of seasonal volunteers, adopting a user fee system and a partial restoration of proposed budget reductions, these parks will be open for 1994. Nevertheless, at the State level, economic reality has become a primary factor in the forging of public lands policy. A trend toward higher degrees of self-support through user fees, etc., is gaining momentum - suggesting that there will be increasing pressure to economically justify not only public land acquisitions but potentially the retainer of existing public lands.

In summary, the State is not considered to be a buyer for large tracts of remote natural lands. The Exxon Valdez Oil Spill Trustee Council, as a buyer, is considered in a subsequent discussion.

U. S. Government

At the Federal level, the acquisition of additional public lands in Alaska is probably not practical given the extent of the existing inventory and the shallow depth of the public's pocket. The U. S. Fish and Wildlife Service has been "Faced with continued expansion of the sprawling system of wildlife refuges it manages and an operating budget that has not kept pace...". Potentially, "... many long-standing public activities on wildlife refuges, such as boating, off-road vehicle use and rock climbing, may be stopped." "Refuges also may be closed during slow periods when there are few visitors, such as in the winter months, and some recently established refuges may not be managed at all."¹⁸ "National Park

17. "GOP lawmakers want to cut out coastal parks" *Anchorage Daily News*, (4/2/94) D2.

18. "Refuges go back to basics" *Anchorage Daily News*, (4/2/94).

Service Director Roger Kennedy told a House Natural Resources subcommittee there is a \$5 billion backlog of physical needs in the parks, and no way to pay for the projects in this era of deficit reduction. "The National Park Service must explore new means of enhancing revenues on its own".¹⁹

Increasing the cost of using public lands is probably the preferred solution over increasing taxes. The current administration recognizes that grazing fees for federal lands are artificially low so that the taxpayer effectively subsidizes the cattle industry. Concerned that current mining laws effectively "give away taxpayers' assets...", Secretary of the Interior Bruce Babbitt indicates: "We're looking at moving toward business practices that are accepted in the private sector."²⁰

The public, as represented by one or another Federal agency, has acquired a handful of large tracts in Alaska in recent years. However, each of these represents a settlement, exchange or the need for a specific property for a specific purpose. None occurred in a market in which there was more than one identifiable purchaser. In most cases there were no other sellers offering suitable alternatives.

On some occasions public agencies of both the State and Federal Governments are known to have paid prices in excess of appraised values. Although no other buyers were on the horizon and a position of bargaining strength is presumed, the graciousness of public agencies is understandable. Public agencies have an implied responsibility to placate an owner that a private sector buyer normally does not.

To date, demand by the U. S. Government for large tracts of natural lands is not evidenced by the data. In our investigation, we could confirm only 11 transactions (excluding exchanges) reflecting the purchase of tracts exceeding 1 section (640 acres) in size since 1982. Of those 11, three reflect private sector purchases based on an economic use. Two of those three reflect the same property - sold once in 1985 and subsequently foreclosed and re-sold in 1990.

19. "Congress balks at park service fee proposal" *Anchorage Daily News*, (6/11/94) D6

20. Babbitt sees mining reform law in place by fall" *Anchorage Daily News*, (6/2/94) D4.

However, the most recent data, including this “pair of sales” suggests that values were dramatically affected by the onset of the oil related recession in 1986 and that only subsequent data is relevant. This contention is supported by a sub-market that likely represents as free and balanced a market as exists in Alaska - recreational/residential waterfront lots on the Kenai River. The Kenai River is arguably the most popular outdoor recreation attraction in all of Alaska. Nearly every accessible privately-owned river-front parcel (excepting Native Corporation lands) has been subdivided to create the maximum number of lots permitted. Supply is adequate as evidenced by several available listings at any given time. Market exposure periods that typically average six months or less indicate that demand is strong. This submarket is sufficiently adequate (numerous buyers and sellers) to identify trends.

The buyer of a lot on Upper Island reported that he paid top dollar (\$38,550) for a lot adjacent to a friend's lot but that he was aware they had sold in the early 1980s for \$5,000 to \$15,000 more. The seller of a lot on Dow Island reported a November 1992 sale at \$20,000 - \$5,000 less than the 1983 purchase price of \$25,000. Based on the data, sales occurring prior to 1986 have little relevance except to establish a decline in “market” values. “Market” values of remote and semi-remote recreational and rural residential properties crashed just as did virtually all property types located in and around the major communities.

Based on these observations, only 9 of the 11 large acreage sales are relevant in terms of market conditions. Only one reflects a private sector purchase based on an economic use (recreation subdivision). Another represents a targeted acquisition by a borough government of land for public use. Of the remaining 7 transactions, two represent recent acquisitions by the EVOS Trustee Council (Kachemak & Seal Bay) - only made possible by a onetime windfall of funds. The arithmetic leaves five large tracts that have been targeted and acquired by agencies of the federal government since 1986 (excluding exchanges). Of these five, three were acquired for a backscatter radar installation near Tok. Two of the three, secured by an option for an easement, were not utilized and the properties are slated for reversion back to the sellers.

In summary, agencies of the U. S. Government have purchased only two large tracts in recent years - a sea bird sanctuary on the Pribilof Islands and a conservation easement on a tract surrounding Tazimina Lake in the Lake Clark National Park and Preserve. A review of the data suggests that the abilities of the U. S. Government are limited and that acquisitions are more likely to be pursued using "land exchange" as the means. Clearly, demand for large tracts by various agencies of the U. S. Government is not measurable. The occasional pursuit of strategic acquisitions should not be construed as evidence of a viable market.

Exxon Valdez Oil Spill Trustee Council

The settlements of civil and criminal suits stemming from the 1989 Exxon Valdez Oil Spill have created super funds of cash. The most notable is the \$900 million fund that is overseen by the Exxon Valdez Oil Spill Trustee Council. Approximately 19 parcels have been targeted for acquisition to preserve habitat. To date, acquisitions in Kachemak Bay on the Kenai Peninsula and Seal Bay on Afognak Island have been completed. However, although the transactions should reflect arm's length negotiations based on appraisals, they do not reflect the workings of a free and open market.

First, there are not numerous sellers. The Council is not free to shop throughout the state for alternatives for which there may be a greater urgency. Rather, the Council is directed to a limited number of specific properties that meet certain criteria - most notably those affected by the oil spill.

Second, there are not numerous buyers. With the exception of limited demand for stands of timber, demand for large tracts of natural lands in Alaska is virtually non-existent. The funds represent a one-time windfall, after which, a reasonable probability of subsequent buyers for these targeted tracts is little to none - particularly for properties purchased at prices unsupported by any economic use. In other words, there is no sense of continuance. It would be difficult to support a contention that a transaction was representative of "market" if, immediately after closing, the realistic prospects for reselling or otherwise recovering the investment in the foreseeable future were zero.

In summary, this source of funds has created a "buyer" so to speak but does not establish an adequate market from which reliable indicators of "market" value can be derived. Of the data to date and the transactions that are likely to be successfully completed in the near future, the appraiser/analyst must consider:

- Were there suitable alternatives from which the purchaser could make a selection?
- Was there more than one prospective purchaser?
- Had the property been exposed to the market for a reasonable marketing period?

- Was there a reasonable probability of a sale to any other party within a market exposure period of one year? five years? ten years?
- If an appraisal influenced negotiations, was the value estimate supported by an economic use?

It is important to recognize that the “sellers” in the two acquisitions to date, are Native Corporations. As previously noted, undeveloped lands belonging to Native Corporations enjoy exemption from taxes, if any, and special protection from creditors. Furthermore, cultural resources (archaeological sites) have been documented on most of the EVOS parcels.

Understandably, the Use and/or Investment Value to a Native Corporation may be higher than “market” value. It is not unreasonable to conclude that the price at which a Native Corporation would be willing to sell - would likely be higher than the price at which a typical owner would sell. Therefore, sales prices reflected by transactions in which undeveloped Native Corporation property was conveyed may reflect only indicators of “personal value” - as opposed to the economic concept of market value.

Summary

To this point we have established that there is no measurable demand for large tracts of Alaska’s remote lands with the possible exception of timberlands. Market exposure periods necessary to sell large tracts are too indefinite to project with any confidence. Acquisitions by various government agencies and the Exxon Valdez Oil Spill Trustee Council, do not establish a market in Alaska that is sufficiently adequate to draw reliable indicators of market value for the subject tract(s) as a whole. “A market in which nothing is happening is no market at all. There must be enough representative transactions to display a clear pattern.”²¹

²¹. Ibid.

CONCLUSION - MARKET OVERVIEW

The observations and findings of the Market Overview distinguish the Alaskan market from other regional markets. The complexity of the appraisal problem is compounded by the characteristics of this unique "market" as well a property-specific features.

The handful of large-scale transactions to date do not establish an adequate market from which reliable indicators of value can be derived. The analyses of these transactions and the reasoning leading to their disqualification are presented in the Addenda of the report. "Transactions that occur in inadequate or insufficiently congruent markets, or between incompetent or ill-informed parties, are not by themselves indicative of market value, which must be estimated on some other basis if it can be said to exist at all."²²

In developing a methodology that meets a test of reasonableness, it is important to recognize that while much of the subject is heavily timbered with merchantable Sitka Spruce, select areas may be better suited for other uses.

²². Jared Shlaes, MAI, "The Market in Market Value," *The Appraisal Journal* (10/84) 494-518.

HIGHEST AND BEST USE

Highest and Best Use is defined in the Tenth Edition of the Appraisal of Real Estate, Appraisal Institute, as:

"That reasonable and probable use that supports the highest present value, as defined, as of the date of the appraisal. Alternatively, highest and best use is the use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and that results in the highest present land value.

PERMISSIBLE USES

The subject parcels are zoned "C-Conservation District". The "...District is established for the purpose of maintaining open space areas while providing for single-family residential, and limited commercial land uses." Regulations permit most of the probable uses of the subject including the harvest of merchantable timber.

Easements are considered to be typical. A restriction prohibits "heavy industrial uses incompatible with use and enjoyment of adjacent park or public recreation lands" on the west one-half of Section 10, T. 19 S., R. 20 W., S.M. The tract is located on the west side of Shuyak Island fronting on Big Bay, just south of USS 9228.²³ Merchantable timber is identified in this area. We have not been provided with a legal opinion or other interpretation as to the whether timber harvesting qualifies as a "heavy industrial use" that would be incompatible. For the purposes of our analysis, we have assumed this timber can be included in a harvest plan. THIS IS A SPECIAL ASSUMPTION OF THIS REPORT.

A Certificate for "water rights & access" have been issued to a private party for four small lakes at Port Williams in Section 33, T. 19 S., R. 20 W., Seward Meridian. This interest would not have a negative impact on probable uses of the subject.

In summary, zoning and other restrictions does not adversely impact the utilization of the subject parcels to their Highest and Best Use.

²³. Ibid.

POSSIBLE USES

The subject properties exhibit a variety of topographical features and physical characteristics. It is likely that several land uses could be physically accommodated at some location within its boundaries. Possible uses include:

rural residential homesites	private community/colony
private retreat	recreational cabin sites
commercial recreation	preservation/public use
military -scientific	agriculture-livestock
timber extraction	petro-chemical/mining
marine commercial	special-use permits/licensing

The probability of the possible uses listed are discussed in the following paragraphs.

Rural Residential Homesites

There is a limited market for rural home sites in Alaska. Given the limitations of access, the subject is not well-suited for rural residential uses. Although possible, rural residential uses are not probable.

Private Community/Colony

In November of 1989, a remote oceanfront property on Afognak Island in the Gulf of Alaska, was purchased by a Russian religious group formerly known as the Old Believers. The site was comprised of two tracts totaling only 274 acres and valuable timber was reported to be a major component of the purchase price. Recently, a nearby 60 acre parcel was purchased by a related group. However, such purchases are rare and the probability of acquisitions for similar uses in the subject's locale is perceived to be low.

Private Retreat - Large Tracts

We are not aware of any purchases, for this purpose, of large tracts of several thousand acres. A 4,500 acre parcel on the northern tip of the Kenai Peninsula has been offered for sale for over two years at approximately \$1,000 per acre. The parcel, situated within the Kenai National Wildlife Refuge features 4.5 miles of bluff on Cook Inlet and 36 lakes with a total of over 20 miles of shoreline. The offering is promoted as "perfect for major tourist wilderness resort, private hunting club, executive retreat, or private park". Although the

broker reports that there have been two offers, both were over a year ago and neither came close to closing. Alaska already has vast amounts of land in national parks and reserves, and national forests and designated wilderness areas. Much of this land is accessible by the public and permitted uses often include hunting and fishing. The pool of prospective private-use purchasers for large tracts of remote property in Alaska is perceived to be extremely small and the probability of such a use for the subject properties is low.

Recreational Cabin Sites

We spoke with the area's two largest brokerage firms - Chelsea Realty & Development, Inc. and Associated Island Brokers Inc. Both brokerages concurred that while the market is "soft" select locations would afford an opportunity. There are undoubtedly spectacular attractions in Kodiak Island Archipelago that would anchor a project. For example, an anadromous stream at the head of a scenic protected bay, or the confluence of two rivers/streams would likely attract a developer and ultimately purchasers of recreation sites.

Given the limitations of access and generally harsh climatic conditions, it is likely that subdivided private recreation sites would prove to be the Highest and Best Use for only a handful of select locations within the boundaries of the subject properties. General market data suggests that the initial sales of the best waterfront lots should be brisk. Subsequently, lengthy marketing periods for unsold lots or resales should be anticipated. The marketing periods necessary to sell non-waterfront lots would likely be too lengthy to justify their creation.

Commercial Recreation

In remote areas, lodge operations are the most probable commercial recreation use. In spite of complicated access, it is likely that select locations offer a suitable combination of unique features and characteristics that would attract an entrepreneur within a reasonable market exposure period.

Bernie Vockner of OMB Realty is generally recognized as the most active broker of remote properties. Among his specialties are remote lodges and lodge sites. Mr. Vockner reported that there is typically, several existing commercial lodge operations for sale at any given time and a high failure rate is characteristic of

this type of small business enterprise. Nevertheless, a few sites have recently been acquired for commercial lodges. However, for the most part, new facilities have not been constructed.

A lodge was reportedly proposed for a portion of a 75 acre tract in Chinitna Bay on the west side of Cook Inlet in Southcentral Alaska. Since its purchase in August of 1990, no lodge facilities have been constructed.

In July of 1991, a 12 acre site in the Kakonak Bay area of Lake Iliamna in western Alaska was purchased for a lodge site. The site was considered to be prime for a commercial lodge operation and commanded a premium. Per Mr. Vockner, two full years later, lodges facilities have not been developed.

In September of 1991, a lodge operator purchased five acres on the Naknek River in Western Alaska. The site was intended for a commercial guiding and lodge operation. The sale closed in January of 1992 and to date no buildings have been constructed.

In July of 1992, a 160 acre site on the Sturgeon River on the southwest side of Kodiak Island, was purchased for a commercial fishing lodge. To date, only a 12' x 16' cabin is reported to have been constructed. In October of 1992, the same buyer negotiated the purchase of a 180 acre oceanfront site in Olga Bay on Kodiak Island. The transaction failed to close.

The sale of 110 acres on the Big Susitna River was negotiated in July of 1992. A Japanese-Hawaiian firm, planned to develop a destination resort/lodge exclusively for Japanese employees and clients. Activities would include fishing, boating, hiking, and horseback riding. Per Mr. Vockner, the purchasers could not obtain financing and the transaction failed to close.

In July of 1993, an 80 acre parcel at the confluence of the Nushagak and Iowithla Rivers (western Alaska) was purchased for a commercial fishing lodge. In the same month, a 120 acre parcel on the Nonvianuk River near Lake Iliamna was acquired for a commercial recreation operation. During the past year, no lodge facilities have been constructed on either site.

Although many sites may be perceived as suitable for a commercial lodge operation, few have actually been constructed during the past two to three years. The economic feasibility of most commercial lodge operations is marginal and many of those planned may never be developed. However, the data suggests there is a reasonable probability a handful of entrepreneurs would successfully complete a purchase regardless of speculative prospects. Trends in the visitor/recreation industry signal an emerging marketplace for non-consumptive formats such as sightseeing/photography, hiking, kayaking, etc., - and possible gambling operations. Eco-tourism is the new "buzz-word".

The Afognak Native Corporation plans to launch an archaeological tourism business during the 1994 summer season. The economic feasibility of such a use is unproven in Alaska. The cost of a 9-day session is reported to be \$1,950 - approximately \$217 per day.²⁴ In contrast, the Afognak Wilderness Lodge at Seal Bay charges \$350 to \$400 per day.²⁵ The comparison suggests that while an archaeological tourism business may be feasible and productive - speculative projections do not indicate that archaeological sites can command a market premium over sites well-suited for more conventional commercial-recreation uses (hunting/fishing lodges), etc.).

Preservation/Public Use

Various groups or government agencies may identify and target a specific tract of property for preservation/conservation. Land uses resulting from public pressure include the reservation of natural lands for public use, the preservation of historical and/or archeological sites, or the preservation of fish and/or wildlife habitat.

The subject property and surrounding waters offer spectacular scenery and diverse species of wildlife. The subject as a whole, or select areas within its boundaries, is/are well-suited for public use. However, as a practical matter, public funds are generally not available. The efforts of preservation/conservation groups are, for most part, directed in higher priority areas outside of Alaska.

24. Georgene Sink, Kodiak Daily Mirror, "For A Fee, You Can Explore Island's Past" - reprinted in Dispatch Alaska, a weekly feature in the *Anchorage Daily News*, (2/1/94) B3.

25. Fly-In Lodges, *Alaska Business Monthly*, (May 1993) 39-62.

The probability of a preservation/conservation use would be relatively high for any select areas of the subject that may be identified as strategic or crucial habitat for threatened or endangered species, not sufficiently protected by existing fish and wildlife regulations, various restrictions such as streamside buffer zones in which logging is prohibited, or special legislation (i.e. Marine Mammals Protection Act, etc.).

The presence of endangered species can have a negative impact on value. "An endangered species' presence on a parcel of vacant land reduces the area available for sale or development, and can impose a financial cost upon the land's owner. In the final analysis, the value of the land will be less with the endangered species than without, even though the animals may provide aesthetic, economic, and ecological benefits."²⁶ Most of the subject is fairly typical of the coastal regions of Southcentral Alaska and we are not aware of any threatened or endangered species, not sufficiently protected, for which the subject represents strategic or crucial habitat.

However, as a result of the Exxon Valdez Oil Spill, 19 "key" parcels (including Kachemak Bay and Seal Bay) within the general locales of Prince William Sound, Kodiak Island, and the Kenai Peninsula, have been identified as high-priority acquisitions by state and federal officials. The prioritization process included input from biologists, ecologists, archeologists and recreation specialists. "The parcels, which total more than 240,000 acres, could help species injured by the 1989 spill recover by providing them with habitat."²⁷

The key phrase in the previous quote is "could help". Many of the acquisitions are probably not truly necessary as a function of recovery of species affected by the spill. The properties are remote and except to timberlands, the prospect of economic development poses little genuine threat to fish and game populations - particularly when various public agencies already have the regulatory power to assure the protection of virtually every significant species. Backlands, particularly those contiguous with uncontaminated waterfrontage, have little, if any, relevance to the recovery of species affected by the spill.

26. Krisandra A. Guidry, PhD, and A. Quang Do, PhD, "Appraisal Assignments Involving Endangered Species", *The Appraisal Journal* (January 1994) 98-102.

27. Natalie Phillips, "Trustees Write Shopping List", *Anchorage Daily News*, (12/1/93).

Furthermore, according to maps obtained from the State of Alaska Department of Natural Resources, "oiling" occurred only in an isolated area within the boundaries of the subject - Shuyak Harbor at the southwest end of the island. Along approximately 1/4 mile of shoreline on the west side of the harbor, "light" oiling (1% to 10% coverage) was documented. A small area at the north end of this section of shoreline received "moderate" oiling (10% to 50% coverage). On the opposite side of the harbor, "very light" coverage (<1%) and "light" coverage (1% to 10%) was documented in a couple in a couple of random locations.²⁸

It should be noted that a preservation/conservation or public use for some of the subject properties is only made reasonably probable by the existence of the oil-spill settlement funds, assuming that negotiations can reach a successful conclusion. "The Trustee Council cannot afford to buy all the parcels, cautioned John Sandor, a trustee and head of the State Department of Environmental Conservation."²⁹ For the remaining acreage, preservation/conservation or public use are not probable.

²⁸. Alaska Department of Natural Resources, Land Records Information Section, Map Production: UTM Zone 5.

²⁹. Ibid.

Military/Scientific

In late 1988 and early 1990, the U. S. Air Force purchased three tracts totaling approximately 11,245 acres of remote property in Alaska's interior for an "over-the-horizon backscatter" radar facility. These transactions represent a rare occurrence and in fact, the project was never completed. Two of the three tracts are slated for reversion back to the seller.

"Downsizing" better describes the overall trend. In late 1981, the U. S. Government filed a notice of its intention to relinquish the Naval Arctic Research Laboratory near Barrow, Alaska. The facility was subsequently acquired by a Native corporation in an exchange. More recently, cutbacks in military installations are in evidence. Fort Richardson near Anchorage, has reduced it's force 2,000 personnel which began in 1994. In summary, the subject is not believed to represent a strategic site for military purposes or scientific research. The probability that any of the subject properties would be acquired for such purposes is perceived as extremely low.

Agriculture-Livestock

Due to a short growing season and harsh environmental conditions, much of Alaska is not well-suited for farms, dairies, or livestock production. Recent state sponsored efforts including the Point MacKenzie dairy project and the Delta barley project have been failures for the most part. Cattle ranching on Kodiak Island has been on the decline for several years. The probability that farming and/or livestock production on the subject properties will be financially feasible in the near term is considered to be very low.

Timber

The subject features a substantial timber resource and commercial operations are probable. The value of this resource has been estimated by Pacific Forest Consultants, Inc. The report has undergone an extensive review process prior to incorporation into our report and we have relied on the value estimate in our analyses.

Petro-Chemical/Mining

According to a "Mineral Potential Report" prepared by Mr. Donald L. Stevens, Ph. D. of Stevens Exploration Management Corporation (Anchorage); "The mineral potential and previously claimed mineral occurrences do not appear to have any significant market value." "The probability of discovery of any significant mineral occurrence is so low that there is no negative impact on the value of the surface estate." "There is no market value for any undiscovered mineral resource."

According to Suzanne Gaguzis of the Division of Oil & Gas (AK DNR), offshore leasing activity scheduled for the Shelikof Strait (Sale #85) has been delayed until November 1997. Demand for on-shore support sites is not currently evidenced.

Marine Commercial

The potential for an emerging mariculture industry, and possible demand for shore-based sites and facilities is speculative at this time. The feasibility of operations in this limited access region has yet to be established. Commercial set-netting for salmon is limited to a fixed number of permit holders. Demand for onshore sites by the commercial fishing industry is minimal.

Use Permits - Licensing

A single economically supportable use for large-scale tracts in Alaska would be extremely unusual. For remote parcels offering little commercial/industrial opportunity, special use permits and licensing to sportsmen, outdoor enthusiasts, or commercial guides, represents a possible use from which a fairly reliable income stream could be derived. If other opportunities are sufficiently limited, licensing represents a probable use, at least for an interim period until higher and better uses are supportable.

Conclusion (Possible Uses)

In the previous paragraphs, we have considered several possible uses and evaluated their probability based on the findings summarized in the Market Overview. There is a reasonable probability that the subject will be acquired for habitat preservation purposes by the Exxon Valdez Oil Spill Trustee Council. However, non-economic conclusions of Highest and Best Use are inappropriate in an appraisal seeking "Market Value".

Based on our observations and analyses, select sites may support commercial lodge operations and attract subdividers/developers/of waterfront recreation subdivisions, however, timber harvesting is the most probable use of the majority of the subject's acreage.

FEASIBLE USES

Fish, wildlife and scenic resources are the primary attractions of the Kodiak Archipelago. However, private and commercial recreational uses of the subject are the most probable for only a limited number of locations within the foreseeable future. And, recreation is not able to support even nominal values for large tracts. The majority of the subject's acreage is heavily forested with merchantable timber and related uses are the most probable. The topography is favorable and operations are feasible according to the Pacific Forest Consultants Inc., report.

MAXIMALLY PRODUCTIVE USE

In order to determine the Highest and Best Use of the subject, it is necessary to estimate the value of the timber resource and the value of the land based on the sales of properties intended for alternative uses. There is an active market for remote recreational waterfront property.

According to the timber appraisal prepared by Pacific Forest Consultants, merchantable timber has been identified and quantified on approximately 36% of the subject's acreage (9,680 of 26,665.62 acres). The estimated present value of the timber resource equates to the following per acre values:

Estimated Timber Value	\$24,000,000	
Total Acreage of Subject	÷ 26,665.62 acres	
Indicated Overall Value per Acre		\$900.04/acre
Estimated Timber Value	\$24,000,000	
Acreage w/Merthantible Timber	÷ 9,680 acres	
Indicated Value per Acre of Timbered Lands		\$2,479.34/acre

A single Highest and Best Use for the entire parcel may be a supportable conclusion. However, select areas/sites within the boundaries of a large tract may be suitable for higher and better uses than that for the whole. Typically, remote non-timbered backlands are of low utility. Market prospects are extremely poor and only nominal per acre values may be supportable.

On the other hand, ocean, river, or lake front acreage is suitable for a greater number of uses. This market segment is limited but active nonetheless and higher values (than backlands) are supportable.

Supportable bulk values of various land types based on our analyses of sales of properties not intended for timber harvest are summarized in the following table.

Strategic Waterfront Sites (to an average depth of 1/4 mile)	\$1,120/acre
Non-Strategic Waterfront Acreage Featuring Favorable Topography (to an average depth of 1/4 mile)	\$585/acre
Non-Strategic Waterfront Acreage w/Unfavorable Topography & Contiguous Backlands	\$100/acre

Based on our analyses, a range of \$585 to \$1,120 per acre is supportable for the subject's waterfront acreage to an average depth of 1/4 mile. Again, the indicated values have been adjusted for size to reflect the inclusion of these components into the whole.

According to the Pacific Forest Consultants appraisal, the merchantable timber resource is generally concentrated in the western portion of the subject with high densities along the coast. By matching the timber "type" numbers of the "Final Harvest Plan" with the grid map, we are able to confirm that the timber resource supports the highest present value of nearly all of the oceanfront acreage. Oceanfront acreage in only four locations lack merchantable timber. That acreage is suitable for private or commercial recreation.

CONCLUSION OF HIGHEST AND BEST USE

Although there is a reasonable probability that the subject parcel will be acquired for preservation/conservation, the intended use does not represent the Highest and Best Use. The acquisition of this acreage is only reasonably probable due to a one-time windfall of funds - without which the probability of such an acquisition would be little to none.

Based on our analyses and observations, the Highest and Best Use as of September 1, 1994, the date of valuation, is a mixed use summarized as follows:

- timber harvest on acreage with merchantable timber
- private or commercial recreation on waterfront acreage without merchantable timber
- speculation for low-utility backlands without merchantable timber

Special purpose licensing/permitting is practical interim use for timberlands scheduled for later harvest and speculative backlands.

ESTIMATE OF VALUE

Methodology

Lengthy land value analyses and a timber appraisal were necessary to determine Highest and Best Use of the subject. In order to simplify the narrative, the findings are summarized in the following table and the value estimate is developed in this section. The land value analyses and the timber appraisal are presented in subsequent tabbed sections.

Strategic Waterfront Sites (to an average depth of 1/4 mile)	\$1,120/acre
Non-Strategic Waterfront Acreage Featuring Favorable Topography (to an average depth of 1/4 mile)	\$585/acre
Non-Strategic Waterfront Acreage w/Unfavorable Topography & Contiguous Backlands	\$100/acre
Estimated Timber Value	\$24,000,000

The value estimate of the subject requires an application of the findings in a manner that recognizes the Highest and Best Use of the subject is a mixed use in which various components contribute to an overall value. Based on the Highest and Best Use analysis, our inspection of the property and a review of the data, the subject is considered to consist of the following components:

Estimated Value of Timberlands

- the value of merchantable timber
- the value of cut-over timberland

Estimated Value of Land Without Merchantable Timber

- strategic waterfront sites, if any
- non-strategic waterfront acreage featuring favorable topography
- non-strategic waterfront acreage with unfavorable topography & contiguous backlands

It is important to recognize that while we have identified separate components that each contribute to an overall value, our methodology has been developed and applied so as to avoid a summation of stand-alone values. Rather, the contribution of each component reflects an acknowledgement of its inclusion into the whole. The estimated value of the timber represents a discounted present value based on a consideration of market prospects over time. And, the non-timberland values reflect their "bulk" value aspect - in this case incidental to the estimated value of the timber resource. The estimated value of each component is developed in the following sections.

Estimated Value of Timberlands

Merchantable Timber

The timber appraisal prepared by Pacific Forest Consultants, Inc., estimated the present value of the subject's merchantable timber, as of September 1, 1994, at \$24,000,000 based on the "final harvest plan" for 9,680 acres. The present value was derived from a "total net value" (gross value less costs) of \$42,870,778 discounted @ 9% over a 12-year harvest plan (see pages 31 through 35 of the timber appraisal).

The timber appraisal has undergone an extensive review process prior to its inclusion in our report. We have assumed the appraisal fairly represents the market value of merchantable timber. THIS IS A SPECIAL ASSUMPTION OF OUR REPORT.

Cut-over Timberland

It should be noted that only the timber resource is the subject of the timber appraisal so that the estimated value would fairly represent either the acquisition of timber rights or the contributory value to an underlying land value. Arguably, cut-over timberland has a value as evidenced by sales of timber only (ownership of the underlying land is not conveyed). As non-productive land for which long-term speculation is the Highest and Best Use, the residual value of 9,680 acres of timberland is considered to be fairly represented at a nominal \$100 per acre (see Non-Strategic Water Frontage Featuring Unfavorable Topography & Contiguous Backlands)

Estimated Value of Land Without Merchantable Timber

Strategic Waterfront Sites

We previously concluded that a supportable "bulk" value for strategic waterfront sites is \$1,120 per acre. Each strategic waterfront site identified within the boundaries of the subject would be allocated 160 acres - the unit of comparison used in the analysis. In the event that one side of the strategic river/stream confluence or mouth is not owned by the owner of the subject, 80 acres would be allocated. However, based on a review of the timber grid map, strategic sites at the mouths of anadromous streams all lie within areas where merchantable timber is identified. For these sites, the timber resource supports the highest present value. Therefore, none of the subject acreage is allocated to this component.

Non-Strategic Waterfront Acreage Featuring Favorable Topography

We previously concluded that a supportable "bulk" value for this component is \$585 per acre. Due to a shoreline punctuated by numerous coves and peninsulas, it is difficult to quantify the exact amount of this component. For the purposes of our analyses, we have estimated the acreage of this component as the distance of shoreline featuring favorable topography - times an average "depth" considered to be adequate for most probable uses of remote waterfront acreage. Topography is considered to be "favorable" when the initial 100 foot contour illustrated on the United States Geological Survey (U. S. G. S) quadrangle maps, is set-back a notable distance from the waterfront so moderately sloping usable terrain is evident.

Distance of Shoreline

The distance of shoreline featuring favorable topography is estimated based on our aerial inspection and a review of the U. S. G. S quadrangle maps (topographical maps). One inch on the topo maps equals one mile - 5,280 feet.

Appropriate Depth

The sales used in our analysis reflect a general range of parcel sizes from 60 to 180 acres with a central tendency of 160 acres. This common denomination, a quarter of a section, had been a standard for BIA allotments and federal homestead programs. Variations are often the result of irregular topographical features (shoreline) or reflect U. S. Surveys, mining claims etc.

Commonly traded parcels in denominations of 40 and 80 acres often reflect typical and logical dispositions of 160-acre tracts. A 160-acre parcel with extensive frontage would be well-suited for subdividing into more marketable parcels. It is not unreasonable to conclude that values would be maximized if the water frontage-to-depth ratio allowed for further subdividing opportunities of smaller parcels. Where backlands are undesirable, steep or otherwise unusable - 1 mile of water frontage (5,280') at a depth of 1/4 mile (1,320') would represent an optimum configuration for 160 acres. In reality, shorelines are irregular and waterfront parcels would often reflect lesser or greater depths. In our analysis, 1,320 feet is considered to be an average depth - adequate for the most probable uses of remote waterfront acreage. Based on these dimensions, one mile (5,280') of non-strategic water frontage featuring favorable topography, at an average depth of 1,320 feet, represents 160 acres. On the U. S. G. S quadrangle maps (topographical maps), one inch equals one mile. The subject's non-strategic water frontage featuring favorable topography is measured in 1/4, 1/2 and 1 inch increments. Where the shoreline is extremely irregular, we have made a rough allocation acreage based on scaled measurements.

Our allocation of this component is based on an aerial inspection, a review of the topographical maps and the "Final Harvest Plan" of the timber appraisal report. By matching the timber "type" numbers of the "Final Harvest Plan" of the timber appraisal with the grid map, we are able to identify four locations of non-strategic waterfrontage that features favorable topography but not merchantable timber (see worksheet map on the following page). Waterfront acreage in these areas is suitable for private or commercial recreation. The four locations are identified in the following table with the acreage allocated.

LOCATION	ALLOCATION	AC.
southeast end of Carry Inlet	1 mile of frontage x 160 acres	160 ac.
east shore of Shangin Bay	1.5 miles of frontage x 160 acres	240 ac.
Sec. 39 & 32 west of Shangin Bay	rough allocation based on scaled measurements	80 ac.
SWC of subject at Cape Newland	rough allocation based on scaled measurements	160 ac.
TOTAL		640 ac.

Non-Strategic Waterfront Acreage w/Unfavorable Topography & Backlands

Based on our analyses, \$100 per acre is considered to be an appropriate estimate of the nominal value of the subject's "non-strategic waterfront acreage featuring unfavorable topography and contiguous backlands". We have made no adjustment for size as the indicated nominal value was derived from Comparables reflecting a range of parcel sizes that included bulk acreage. This component includes all of the acreage not included in the harvest plan and the waterfront acreage considered to be suitable for private or commercial recreation. The calculations are summarized as follows:

Total Acreage	26,665.62	ac.
Less: Acreage with Merchantable Timber	(9,680)	ac.
Less: Strategic Waterfront Acreage	(0)	ac.
Less: Non-Strategic Wtf w/Favorable Topography	(640)	ac.
Non-Strategic Wtf w/Unfavorable Topo & Backlands	16,345.62	ac.

FINAL VALUE ESTIMATE

Based on our analyses, the final value estimate of the subject is calculated as follows:

<u>Allocation of Components</u>					
Acreage with Merchantable Timber	9,680	ac.			
Strategic Waterfront Acreage	0	ac.			
Non-Strategic Wtf w/Favorable Topography	640	ac.			
Non-Strategic Wtf w/Unfavorable Topo & Backlands	<u>16,345.62</u>	<u>ac.</u>			
Total Acreage	26,665.62	ac.			
<u>Value Estimate Calculations</u>					
Estimated Value of Merchantable Timber				\$24,000,000	
<u>Estimated Value of Cut-over TimberLand</u>	9,680	ac. @	\$100	<u>\$968,000</u>	
Estimated Value of TimberLands					\$24,968,000
Strategic Waterfront Acreage	0	ac. @	\$1,120	\$0	
Non-Strategic Wtf w/Favorable Topography	640	ac. @	\$585	\$374,400	
<u>Non-Strategic Wtf w/Unfavorable Topo & Backlands</u>	16,345.62	ac. @	\$100	<u>\$1,634,562</u>	
Estimated Value of Land w/o Merchantable Timber					\$2,008,962
Estimated Value					\$26,976,962
				(rd)	\$27,000,000

ESTIMATE OF VALUE
(land not intended for timber harvest)

Valuation Premise

Several high-profile transactions involving large Alaska tracts do not meet the test of a market value transaction. The analyses of these transactions and the reasoning leading to their disqualification are presented in the Addenda of the report. Based on these analyses and the investigation summarized in the Market Overview, the “market” for large tracts of Alaska lands is considered to be inadequate for purposes of estimating the value of the subject. A sufficient quantity of data, qualifiable as adequate, is simply non-existent.

There is a relatively large body of data for parcels containing less than 640 acres (the equivalent of one section). The appraiser’s task is to build a credible bridge from this data to the subject properties - each consisting of several thousand acres. Two acknowledgments are central to the correlation of this data.

First, select areas within the boundaries of the subject are suitable for higher and better uses than other areas. In order to recognize the positive contribution of higher-value acreage to the value of the whole, an allocation of the subject parcel(s) into meaningful components is necessary.

Second, an economic unit of acreage should be recognized - beyond which size adjustments are not supportable. Our valuation premise with regard to these acknowledgments is developed in the subsequent subsections.

Allocation

Various land uses tend to gravitate toward desirable physical features (geographic/topographic) and/or concentrations of fish and wildlife resources. However, most often, all of the water frontage on any given remote Alaskan waterbody is not in private ownership (excepting native corporations) or otherwise utilized. This characteristic is due to a combination of factors. First, the majority of Alaska's remote lands are owned by government agencies and native corporations. Second, rugged topographical features render much of the waterfront acreage unsuitable for any use. Finally, and perhaps most significant, distance and often harsh weather conditions combine to deny practical access to the majority of would-be users.

Understandably, individuals would select the sites that provided the greatest utility. For many locales, only an extremely limited amount of remote waterfront land can be expected to be utilized within the foreseeable future. Native village sites, individual Native Allotments, and private non-Native parcels in the southwest Kodiak Island region represent only a fraction of the total waterfront.

On a larger scale, Native Corporations selecting their entitlements pursuant to ANCSA, typically avoided unusable acreage as much as possible. Coastal lowlands, river valleys, and sloping uplands were obviously preferred to glacier-capped peaks.

Based on the typical land use patterns of most remote Alaska locales; our review of available data; our aerial inspection; the subject acreage is considered to consist of three components:

- "strategic" waterfront sites
- non-strategic waterfront acreage featuring favorable topography.
- non-strategic waterfront with unfavorable topography and contiguous backlands.

Note: The overall values will not be summations of stand-alone components. Where appropriate, the component values have been adjusted for size to reflect their inclusion into the whole.

Size

Most real estate markets recognize that per acre values decrease as parcel sizes increase. This is particularly true in counties, boroughs, and municipalities where the process of subdividing larger parcels into marketable denominations has become both time consuming and expensive.

Where adequate data is plentiful, reliable size adjustments can be extracted. As previously noted, sales of large tracts of remote Alaska lands that can be qualified as "market" sales, are almost non-existent. With the exception of timberlands in Southeast Alaska, we are aware of only two private-sector purchases of large tracts (> 1,000 acres) in Alaska within the past twelve years (2,053 acres in 1982 and 2,220 acres in 1990). The data suggests that market prospects are extremely limited for 1,000 acre parcels let alone tracts containing 10,000 to 100,000 acres.

In depressed or oversupplied markets, values typically free-fall to a point at which speculators, anticipating future benefits, will buy. There is surely a price at which large tracts of apparently limited utility remote acreage would sell. However, the price that would prove to be a sufficient incentive to attract a speculator or developer/entrepreneur to the subject as a whole, within a reasonable marketing period, is impossible to predict. Available market data indicates that the most marketable denominations of acreage are 160 or less. However, a sell-out of tens of thousands of acres in a subdivision approach is too speculative to be considered reasonably probable within any foreseeable time period.

In appraisals of large tracts of remote Alaska land, a consideration for size is likely to be the most significant source of disparity. As a practical matter, again, with the possible exception of timberlands, prospective private sector buyers cannot be identified for either 1,000 or 10,000 acre tracts. There is clearly no market-driven demand for large tracts in Alaska. As a result, a sufficient quantity of adequate data is not available to support size adjustments beyond what is reflected by the sales of relatively small parcels (< 1 section or 640 acres).

To reflect considerations for progressively larger tracts, an appraiser may develop adjustments based on a mathematical model. However, analyses of size-to-price relationships typically confirm that downward size adjustments do not increase in uniform increments corresponding to increases in parcel size. Rather, their magnitude tends to diminish toward a point (size) from which further adjustments are not supportable.

This is a significant acknowledgment. Identifying that “point” as a recognized unit in terms of acreage, would serve two primary purposes. First, the potential for unsupportable theoretical adjustments to skew the analysis would be avoided. Second and most important, the potential for serious inequities would be minimized. This “potential” is illustrated in the following example.

Two physically identical, adjacent tracts are owned by the same owner and differ only in size. One contains 3,200 acres (5 Sections) and the other is twice its size - 6,400 acres (10 Sections). Market prospects for both tracts (in bulk) are perceived to be little to none. By the application of non-market supported mechanical adjustments, a single Section (640 acres) contained within the boundaries of the 3,200 acre tract (5 Sections) would be valued higher than an identical adjacent section contained within the boundaries of the 6,400 acre tract (10 Sections).

The inequity results from a misinterpretation of the significance of the parcelization. Where contiguously owned tracts are identified separately, they may have been conveyed at different dates and/or from different grantors. It is our opinion that parcelizations based on previous conveyances or arbitrary allocations - do not create legal descriptions. Rather, the parcels represent informal assemblages of several sections and/or portions of sections that can presumably stand alone as legal descriptions. We are not aware of any entity in Alaska that would require a formal platting or subdivision procedure in order to recognize the conveyance of a single section (640 acres) from an arbitrary or informal assemblage. Based on our observations, one section (640 acres) appears to be an appropriate benchmark for our analysis. One section (640 acres) is a recognizable, conveyable unit and its relationship to smaller parcels, in the form of size adjustments, can be established from available data. Furthermore, the disposition of 640 acres, either in bulk, or in more marketable denominations, is a reasonably foreseeable event. For the purpose of the assignment, we recognize one Section (640 acres) - as the point above which marketing probabilities, and ultimately further size adjustments, become philosophical.

VALUE ESTIMATE

(land not intended for timber harvest)

There are a number of acceptable procedures that can be used when valuing land. "Sales comparison is the most common technique for valuing land and it is the preferred method when comparable sales are available".³⁰ The Direct Sales Comparison Approach involves the comparison of the subject to similar properties that have been recently sold. Sales of similar properties are correlated to the subject by adjusting for various inequalities on an item by item basis. Elements of comparison considered to be the most relevant to the valuation of the subject are summarized as follows:

- financing terms
- market conditions (sale date)
- real property rights conveyed
- conditions of sale (motivation)
- physical features and characteristic
 - location
 - access
 - soils and topography
 - size
 - shape

As previously noted, the subject acreage is considered to consist of three components:

- "strategic" waterfront sites
- non-strategic waterfront acreage featuring favorable topography.
- non-strategic waterfront with unfavorable topography and contiguous backlands.

Each component requires an individual analysis.

30. Appraisal Institute, *The Appraisal of Real Estate*, Tenth Addition (1992) 302.

Methodology

All three of the EVOS Restoration Team Habitat Protection Work Group's recreation/tourism ratings ("low", "moderate", "high") are represented within the Kodiak Archipelago. Available market data reflects sporadic activity in several locales but it establishes a range of values within which all three ratings are fairly represented.

A master valuation of representative acreage and a correlation to the subject is considered to be an appropriate approach. For the first two components, we have estimated the value of hypothetical premium "key parcels". Correlation to the subjects will be based on the recreation/tourism ratings of the Work Group ("low", "moderate", and "high"). It is not unreasonable to conclude that properties rated "high" would have a market advantage over a similar property rated "low". Available market data confirms this relationship. The following table summarizes sales of properties within areas rated by the Work Group.

Comparable	Locale	Date	Area	\$/Ac.	EVOS Rec./Tour Rating
Comparable No. 19	EVOS # KON06	7-92	160	\$676	"Low"
Comparable No. 12	EVOS # ENB08	10-86	69	\$1,158	"Moderate"
Comparable No. 20	EVOS # AKI06	10-92	180	\$1,722	"High"

In summary, actual market activity lends validity to the relevance of the Work Group ratings and our methodology.

The utility of the third component is so limited that value is not likely to be sensitive to the Work Group ratings. In our analysis, one representative value estimate for this component will be universally applied.

VALUATION - STRATEGIC WATERFRONT SITES

Select locations within the boundaries of the subject parcels may be considered geographically and physically strategic to a developer or entrepreneur. A general description of the hypothetical strategic "key parcel" is summarized in the following paragraphs.

Location

The "key parcel" is remote with primary access by float plane. The locale is generally described "world class" with regard to the relative quality of recreational opportunities offered. For the purposes of our analysis, "world class" is synonymous with the Work Group's recreation/tourism rating of "high."

Size

We recognize that some commercial recreation and marine commercial uses can be accommodated by sites as small as five acres. However, the sales of small sites for which further subdividing is not probable, usually do not reflect meaningful per acre indicators as they tend to be evaluated by prospective purchasers on a "per site" basis. Larger units of comparison are more appropriate for our analysis because they are more similar to the subject with regard to possible uses - including further subdividing into more marketable parcels. There is a sufficient quantity of data for parcel sizes approximating 160 acres and we have used this unit of comparison in our analysis.

Shape

An optimum shape is generally described as featuring a water frontage-to-depth ratio that allows for further subdividing opportunities.

Strategic Feature

The geographic/physical feature most likely to attract a developer entrepreneur would be the confluence of two anadromous rivers/streams, the outlet of a lake, or the mouth of a river/stream. In the optimum configuration, the site would straddle the river/stream so that control of entry is maximized.

Topography/Soils

Favorable topography/soils is described as moderately sloping with a high percentage of usable uplands.

We have identified several comparables that can be considered "strategic waterfront sites". The data is summarized in the following table. Details of the properties summarized are presented in the addenda of the report.

SUMMARY OF COMPARABLE SALES
STRATEGIC WATERFRONT SITES

#	Region	Neighborhood	Date	Adj. CEV	Acres	\$/AC
1	Southeast	William Henry Bay	9-87	\$149,500	159.99	\$934
2	Southeast	Windham Bay	12-88	\$85,000	98.50	\$863
3	Western	Nushagak River	7-93	\$200,000	80.00	\$2,500
4	Western	Nonvianuk River/Lk	7-93	\$229,000	119.99	\$1,908
5	Kodiak	Horse Marine Bay	4-88	\$100,000	19.30	\$5,181
6	Kodiak	NW Olga Bay	6-88	\$105,000	32.35	\$3,246
7	Kodiak	Moser Bay	1-89	\$100,000	29.10	\$3,436
8	Kodiak	SW Olga Bay	3-89	\$100,000	19.61	\$5,099
9	Kodiak	Terror Bay	6-91	\$470,000	151.21	\$2,500
10	Kodiak	Ayakulik River	8-93	\$1,000,000	574.88	\$1,739

DESCRIPTION OF COMPARABLES

Comparable No. 1 - William Henry Bay, Southeastern Alaska (9/87)

This parcel was an old homestead (1917) located approximately equi-distant (35 miles) from Haines and Juneau at the head of a small bay off the Lynn Canal. The area is located within the boundaries of the Tongass National Forest. The parcel features only 1,799 feet of ocean frontage. However, the Beardslee River flows through the parcel so that water frontage is considered to be extensive. The river supports runs of Coho, Pink, and Chum salmon and Dolly Varden Trout. Merchantable timber, if any, was apparently not a factor and the oil and gas rights were not conveyed. A tidal flat restricts boat access at low tide. Approximately 60% to 70% of the site is fairly flat bottom land with the remainder fairly steep. The parcel was purchased for subdivision into 61 sites. Information regarding market exposure was not available.

Comparable No. 2 - Windham Bay, Southeastern Alaska (12/88)

Windham Bay is situated off Stephens Passage approximately 65 miles southeast of Juneau. The area is located within the boundaries of the Tongass National Forest. Located at the head of Windham Bay, this parcel consists of five contiguous mining claims dating to 1890. Several anadromous streams flow into the Bay. The parcel features only 1,330 feet of ocean frontage. However, Spruce Creek meanders through the parcel so that water frontage is considered to be extensive. A tidal flat restricts boat access to the creek's channel at low tide. The topo maps indicate a generally level site with moderate to steep slopes on either side of the creek. Although partially wooded, merchantable timber was apparently not a factor and the oil and gas rights were not conveyed. The acreage was reportedly purchased for recreational gold panning and as a possible future lodge site. The offering sold within a six month exposure period with a real estate broker.

Comparable No. 3 - Nushagak River, Southwestern Alaska (7-93)

Enroute to Bristol Bay, the Nushagak River collects several drainages including the upper Tikchik Lakes. The area is considered to be a "world class" trophy fishing and hunting area. The site is located approximately 26 miles east of Dillingham at the confluence of the Nushagak and Iowithla Rivers. The 80-acre site occupies only one corner of the intersection but features extensive river frontage and world class fishing opportunities. Access is by float plane or river boat. The topography is fairly level to rolling. There is no merchantable timber on the site and the oil and gas rights were not conveyed. The purchaser's intended use is for commercial recreation. The property was exposed to the market via the BIA process in which sealed bids are invited during an advertisement period of four weeks. If no bids are received, the property is listed for sale with BIA's realty department. The purchase price for this site represents the highest bid received during the initial offering.

Comparable No. 4- Nonvianuk River, Southwestern Alaska (7-93)

The Nonvianuk River flows from Nonvianuk Lake to its confluence with the Alagnak River, a tributary of the Kvichak River - the outlet of Lake Iliamna. The Alagnak is designated a "wild and scenic river" and the region is considered world class in terms of trophy fishing and hunting opportunities. The site is located approximately 100 miles east of Dillingham. It is strategic in that it

features approximately 2,500 feet of frontage on the Nonvianuk River and approximately 350 feet on Larson Lake, a small floatplane lake. The topography is fairly level to rolling. There is no merchantable timber on the site and the oil and gas rights were not conveyed. The purchasers intended use is for commercial recreation. The property was exposed to the market via the BIA process. No bids were received during the initial offering and the property was purchased during the subsequent listing period.

Comparable No. 5 - Horse Marine Bay/Lagoon, Kodiak, Alaska (4-88)

Horse Marine Bay is at the head of Moser Bay in the Olga Bay area of southwest Kodiak Island, approximately 75 miles from the City of Kodiak. Primary access is by float plane. A marine route from Kodiak would be in excess of 150 miles. This small site straddles a small creek at the entrance to Horse Marine Lagoon. An anadromous stream flows from Horse Marine Lake into the Lagoon. The "recreation/tourism" rating by the Work Group is "high" for the area. The topography is fairly level and the site features extensive frontage in relation to depth. There is no merchantable timber on the site but the subsurface rights were reportedly conveyed. The intended uses included a rural residence and commercial fishing and recreation operations. The property had been exposed to the market with a Kodiak real estate company.

Comparable No. 6 - Northwest Olga Bay, Kodiak, Alaska (6-88)

Olga Bay is located in the southwest region of Kodiak Island approximately 75 miles from the city of Kodiak. Primary access is by float plane. A marine route from Kodiak would be in excess of 150 miles. This small site straddles the mouth of an anadromous stream that drains from a small unnamed lake in the northwest part of the bay. The site is located westerly of a parcel rated as "high" (AKI06) by the Work Group. However, it is most similar yet inferior to a parcel located on the opposite shore (AKI08) rated as "moderate". Moorage is exposed to the Bay. The topography is fairly level and the site features extensive frontage in relation to depth. There is no merchantable timber on the site but the subsurface rights were reportedly conveyed. The purchaser's intended use is for commercial recreation. The property had been exposed to the market with a Kodiak real estate company.

Comparable No. 7 - Snug Cove, Moser Bay, Kodiak, Alaska (1-89)

Snug Cove is located on the west side of Moser Bay, the entrance to the Olga Bay region of southwest Kodiak Island approximately 75 miles from the city of Kodiak. Primary access is by float plane. A marine route from Kodiak would be in excess of 150 miles. The cove offers protected moorage and the site was formerly utilized by a cannery operation. A small stream flows across the site into the cove but sportfishing opportunities are minor. The Work Group's "recreation/tourism" rating for this area is "low". The topography ranges from lowlands to steep uplands and access can be complicated at low tide. Frontage in relation to depth is considered to be average (less than optimum). There is no merchantable timber on the site but the subsurface rights were reportedly conveyed. The intended use is for commercial fishing support. The property had been exposed to the market with a Kodiak real estate company.

Comparable No. 8 - Southwest Olga Bay, Kodiak, Alaska (3-89)

Olga Bay is located in the southwest region of Kodiak Island approximately 75 miles from the city of Kodiak. Primary access is by float plane. A marine route from Kodiak would be in excess of 150 miles. This small site is situated at the outlet of Olga Creek, an anadromous stream that drains the South Olga Lake system (upper and lower) into the southwest part of the bay. The "recreation/tourism" rating by the Work Group is "moderate" for the area. Moorage is exposed to the Bay. The topography is fairly level tundra and the site features extensive frontage in relation to depth. There is no merchantable timber on the site but the subsurface rights were reportedly conveyed. The purchaser's intended use was for a commercial fishing operation. The property had been exposed to the market with a Kodiak real estate company.

Comparable No. 9 - Uganik Passage, Kodiak Island, Alaska (6-91)

This former homestead is situated on Terror Bay in the Uganik Passage approximately 30 air miles southwest of the City of Kodiak. Primary access is by floatplane. A marine route from Kodiak would be approximately 95 miles. The site offers protected waters and features extensive ocean frontage at the outlet of a small anadromous stream. The locale is outside the areas rated by the Work Group but located between areas with recreation/tourism ratings of "high" (KON01) and "moderate" (AJV06). Topography ranges from moderate to steep slopes. The site features extensive frontage in relation to depth. No

merchantable timber is located on the site and only the surface estate was conveyed. The homestead was improved with an older house and miscellaneous outbuildings. The adjusted cash equivalent value reflects an allocation for the site (as vacant). The site lies within the boundaries of the Kodiak National Wildlife Refuge and was purchased by the U. S. Fish and Wildlife Service. The property had been exposed to the market for over one year.

Comparable No. 10 - Ayakulik River, Kodiak, Alaska (8-93)

The Ayakulik River is the collector for numerous drainages of western Kodiak Island including Red Lake. The river empties into the Pacific Ocean along a stretch of exposed coastline. The site is located approximately 90 air miles from the city of Kodiak. Primary access is by float plane. A marine route from Kodiak would be in excess of 150 miles. The locale is outside the areas rated by the Work Group but would be considered "world class" by most measures. The Ayakulik is perhaps second only to the Karluk River as a sportfishing destination on the Island. Topography is fairly level tundra above the river's bank. The configuration of the site is optimum in that it straddles the mouth so that control of entry is maximized. There is no merchantable timber on the site but the subsurface rights were to be conveyed. The intended use was preservation/conservation. The buyer (Conservation Fund) sought to limit access and prevent development. This site assures some degree of control over entry to and use of contiguous backlands. The data represents an offer only as opposed to a closed sale and the property had not been exposed to the market.

EXPLANATION OF ADJUSTMENT PROCESS

Financing Terms

The Adjusted Cash Equivalent Value reported in the table reflects previous considerations for terms of sale and allocations for improvements or non-realty components if any (see detailed "Comp Sheets" in addenda).

Market Conditions (sale date)

Sales occurring prior to 1986 have little relevance except to establish a decline in "market" values (see Market Overview). All of the transactions summarized and analyzed occurred from late 1987. The data reflects only spotty activity over a lengthy period of approximately 7 years. An adjustment for market conditions (time) during this period is not supported by the data and we have made no adjustment.

Conditions of Sale (motivation)

Undue stimulus and/or atypical influences, if any, are considered in the Reconciliation of Adjustments.

Real Property Rights Conveyed

The purpose of this appraisal is to estimate the market value of the fee simple interest - less oil, gas, and minerals, (surface estate). Most of the comparables reflect the conveyances of only the surface estate. If an allocation for the inclusion of subsurface rights can be determined by interviews with the buyers and sellers, downward adjustments will be made.

Zoning

The subject properties and those comparables located on Kodiak Island are subject to Borough zoning regulations. The regulations limit the capacities of commercial recreation uses that are probable for strategic sites. However, the minimum lot size in the Conservation District is 5 acres whereas the unit of comparison for our analysis is 160 acres. Furthermore, increased capacities are possible with a conditional use permit. And, the Borough has been in the process of rezoning several parcels to more permissive classifications. In summary, zoning is not likely to influence the value of these strategic sites and we have made no adjustment.

Physical Features and Characteristics

Physical features and characteristics include; location, access; soils and topography; size and shape. Although ten transactions have been analyzed, they reflect only spotty activity over a period of approximately seven years. Due to the limited amount of data, it is extremely difficult to identify and apply reliable adjustments for various physical features and characteristics. Therefore, we have correlated the comparables to the subject in a qualitative analysis described by the Appraisal of Real Estate Tenth Edition as a "Relative Comparison Analysis". In this analysis, various physical features and characteristics are perceived as comparable/equal, superior or inferior. This technique illustrates the relative market position of the subject. A Market Data Grid and Relative Comparison Analysis is presented on the following page.

5	6	7	8	9	10
\$5,181	\$3,246	\$3,436	\$5,099	\$2,500	\$1,739
4-88 (no adjust.)	6-88 (no adjust.)	1-89 (no adjust.)	3-89 (no adjust.)	6-91 (no adjust.)	8-93 (no adjust.)
no known undue stimulus or duress (no adjust.)	no known undue stimulus or duress (no adjust.)	no known undue stimulus or duress (no adjust.)	no known undue stimulus or duress (no adjust.)	see reconciliation	see reconciliation
Fee Simple incl. Subsurface not allocated	Fee Simple incl. Subsurface not allocated	Fee Simple incl. Subsurface not allocated	Fee Simple incl. Subsurface not allocated	Fee Simple Surface Estate (no adjust.)	Fee Simple incl. Subsurface not allocated
\$5,181	\$3,246	\$3,436	\$5,099	\$2,500	\$1,739
Horse Marine Bay, SW Kodiak Island <20,000 150 miles +/- most of route "high" (Work Group) (approx. =)	NW Olga Bay, SW Kodiak Isl. <20,000 150 miles +/- most of route "moderate" (appraiser) (inferior)	Snug Cove, Moser Bay, SW Kodiak <20,000 150 miles +/- most of route "low" (Work Group) (inferior)	SW Olga Bay, SW Kodiak Isl. <20,000 150 miles +/- most of route "high" (Work Group) (approx. =)	Uganik Passage Kodiak Isl. < 20,000 95 miles +/- most of route "moderate" (appraiser) (inferior)	Ayakulik River, SW Kodiak Isl. <20,000 150 miles +/- most of route "high" (appraiser) (approx. =)
19.30 acres (superior)	32.35 acres (superior)	29.10 acres (superior)	19.61 acres (superior)	151.21 acres (approx. =)	574.88 acres (inferior)
extensive waterfront suitable for subdividing (approx. =)	extensive waterfront suitable for subdividing (approx. =)	less than optimum for subdividing (inferior)	extensive waterfront suitable for subdividing (approx. =)	extensive waterfront suitable for subdividing (approx. =)	extensive waterfront suitable for subdividing (approx. =)
straddles creek @ mouth at entrance to lagoon (approx. =)	straddles creek @ mouth (approx. =)	straddles creek @ mouth (approx. =)	one side of mouth of Olga Creek (inferior)	ocean frontage @ mouth of creek (inferior)	straddles river @ mouth (approx. =)
fairly level low % of usable uplands adequate semi- protected (inferior)	fairly level low % of usable uplands adeq. semi- protected (inferior)	level to steep low % of usable uplands protected cove (inferior)	fairly level high% of usable lowlands adeq. semi- protected (inferior)	moderate & steep slopes moderate % of usable uplands adeq. semi- protected (inferior)	moderate slope high % of usable uplands unprotected (inferior)
multi-use incl. comm rec.	commercial recreation	commercial fishing	commercial fishing	habitat preservation	habitat preservation
Negative	Negative	Negative	Negative	Positive	Positive

Reconciliation of Adjustments

The sales price indicators and the indicated overall adjustments are summarized as follows:

No.	Location	Date	Acres	\$/AC	Net Adjust.
5	Horse Marine Bay, SW Kodiak Isl.	4-88	19.30	\$5,181	Negative
8	SW Olga Bay, SW Kodiak Isl.	3-89	19.61	\$5,099	Negative
7	Moser Bay, SW Kodiak Isl.	1-89	29.10	\$3,436	Negative
6	NW Olga Bay, SW Kodiak Isl.	6-88	32.35	\$3,246	Negative
key parcel	Southwest Kodiak Island	n/a	160.00	-----	-----
3	Nushagak River, Western Alaska	7-93	80.00	\$2,500	Approx. =
9	Uganik Passage, NW Kodiak Island	6-91	151.21	\$2,500	Positive
4	Nonvianuk River, Western Alaska	7-93	119.99	\$1,908	Positive
10	Ayakulik River, West Kodiak Island	8-93	574.88	\$1,739	Positive
1	Henry Bay, Southeast Alaska	9-87	159.99	\$934	Positive
2	Windham Bay, Southeast Alaska	12-88	98.5	\$863	Positive

The comparables analyzed reflect a wide range of per acre indicators within which the subject is fairly represented. The considerations given the most weight in the adjustment process are discussed in the following paragraphs.

Comparable Nos. 5, 6, 7, & 8 were included in our analysis because of their close proximity to the subject and the limited amount of data in the Kodiak area. And, three of the four feature extensive water frontage so that further subdividing to the Borough minimum of 5 acres is a possibility. The per acre indicators reflect a price-to-size relationship. However, the consistency of the sales prices (3 @ \$100,000 and 1 @ \$105,000) suggest the parcels were evaluated on a per site basis and that further subdivision opportunities were not a factor. Based on this observation, the relevance of per acre indicators to the valuation of larger parcels is seriously diluted - particularly recognizing that available listings of similar sized parcels in the same area have been marketed for approximately two years without favorable results (Comparable No. 20).

Furthermore, an expanded data search reveals relevant sales of similar sized-parcels outside the subject neighborhood. In summary, Comparable Nos. 5, 6, 7, & 8 can be given little if any weight in our analysis due to their small size in relation to the unit of comparison used our analysis (160 acres).

Comparable No. 9 was an inholding acquired by the United States Fish and Wildlife Service. Although purchased by a government agency, the transaction has some elements of a free, open-market transaction. The property had been exposed to the market for an extended period. While the property was listed for \$1.8 million, the Service offered \$468,000. The offer was rejected and the asking price was later reduced to \$1 million. After a listing period of one year, the price was further reduced to \$550,000 - toward a price considered to be reasonable by the Service. The negotiated price was reportedly supported by an appraisal.

The property is considered to be inferior to the subject "key parcel" and ordinarily an upward, or positive, adjustment would be appropriate. However, the transaction must be weighed with a reality check. Available data suggests that private sector purchasers cannot justify nearly a half million dollars in cash for a remote 160 acre tract (+/-) without merchantable timber. Such transactions are simply not occurring.

The market history of this property represents a classic example of an overly optimistic price free-falling to a point that it becomes a feasible undertaking for someone. In this case, that point is established by the acquisition of an inholding by a government agency. While the procedures followed by the Service appear to have been by-the-book - the price free-fall, to a point that may have been established by a private sector buyer, was effectively interrupted. Although the sale reflects some elements of a market transaction (market exposure, arm's length negotiations), it can be given little weight in our analysis due to the "conditions of sale". The transaction is a project-related acquisition by a government agency subject to undue stimulus - consolidation of Refuge lands and the prevention of incompatible development.

Comparable 10 is the recent offer to purchase a large strategic site at the mouth of the Ayakulik River, one of Kodiak's premier destinations for sport fishermen. The site would be considered "world class" by most measures and

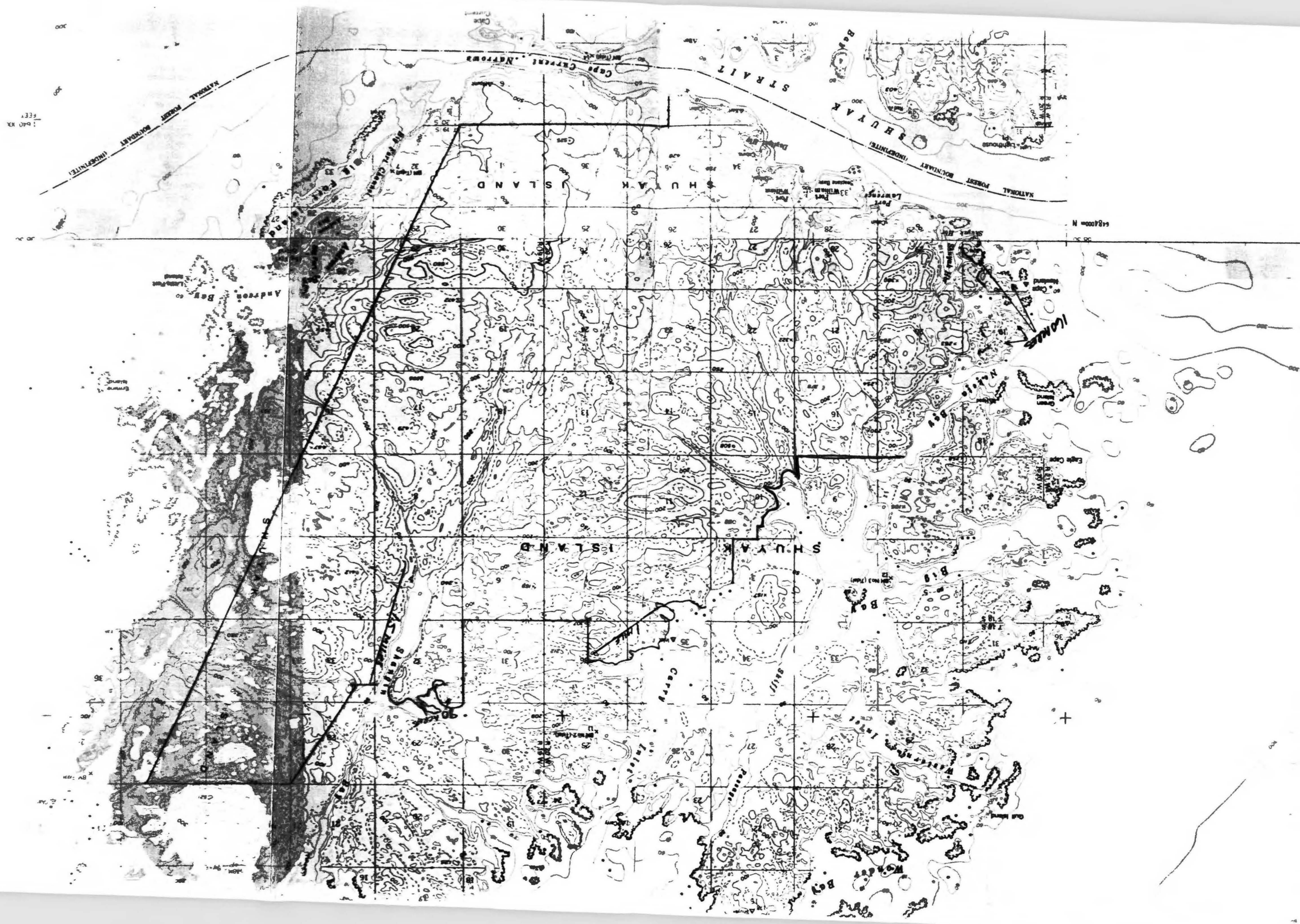
virtually directly comparable to the hypothetical "key parcel" with the exception of size. Based on other recent sales of strategic sites in nearby "world class" areas (Comparable Nos. 3 and 4), the reported purchase price may have been supportable and an upward adjustment for size would be appropriate.

However, it would not be appropriate to give this reported transaction too much weight even if the transaction had been consummated. First, land use economics do not support acquisitions of remote tracts at a half million dollars let alone a million. Second, to our knowledge, the property was not offered for sale nor otherwise exposed to the market. If the probability of a sale within a foreseeable marketing period is little to none, the relevance of the data is suspect. The fact that the ownership entity did not agree to the sale should not be misconstrued as an indication that an even higher value may be supportable. The decision to sell reportedly required unanimity and there was one holdout.

The site was targeted for acquisition by a conservation group seeking to restrict access and development. The group intends to pursue the acquisition and has reportedly set aside the funds for that purpose rather than using it to further other goals and objectives. This direction suggests that the eventually negotiated price will not be optimized by the influence of suitable alternatives (Principal of Substitution) and other characteristics of a free and open market. The analyst cannot know if the acquisition price reflects an extreme value or fairly represents the market norm. While the value may be supportable, the appraiser must look to the supporting data rather than this transaction itself.

Comparable Nos. 1, 2, 3 and 4 indicate a range of values for strategic sites from \$863 to \$2,500 per acre. Giving most weight to the recreation/tourism ratings, Comparable Nos. 1 and 2 are inferior and upward adjustments are appropriate. Comparable Nos. 3 and 4 effectively narrow the value range to \$1,908 to \$2,500 per acre. Both are recent sales of strategic sites in areas offering "world class" outdoor recreation opportunities. Both were purchased for commercial recreation operations and considered to be the most comparable to sites within areas rated "high" for recreation/tourism by the Work Group.

Comparable No. 4 is strategic in that it has both river and lake frontage. However, the quality of this feature is considered to be inferior to the subject



“key parcel” and an upward adjustment is appropriate. Most weight is given to Comparable No. 3. The purchaser was a knowledgeable lodge operator and outdoor guide. He reportedly searched for three years before finding a site he considered to be optimum for his operation. Although the site is superior to the subject “key parcel” with regard to size, any downward adjustment is considered to be sufficiently offset by its occupation of only one corner at the confluence of two rivers. In contrast, the subject hypothetical “key parcel” represents an optimum configuration that straddles an intersecting creek/river so that control of entry is maximized.

In conclusion, it is our opinion that the value of the subject “key parcel” is fairly represented at \$2,500 per acre. Again, the subject “key parcel” is described as “world class” with regard to the relative quality of recreational opportunities offered. For the purposes of our analysis, “world class” is synonymous with the Work Group’s recreation/tourism rating of “high”.

Correlation of the Key Parcel

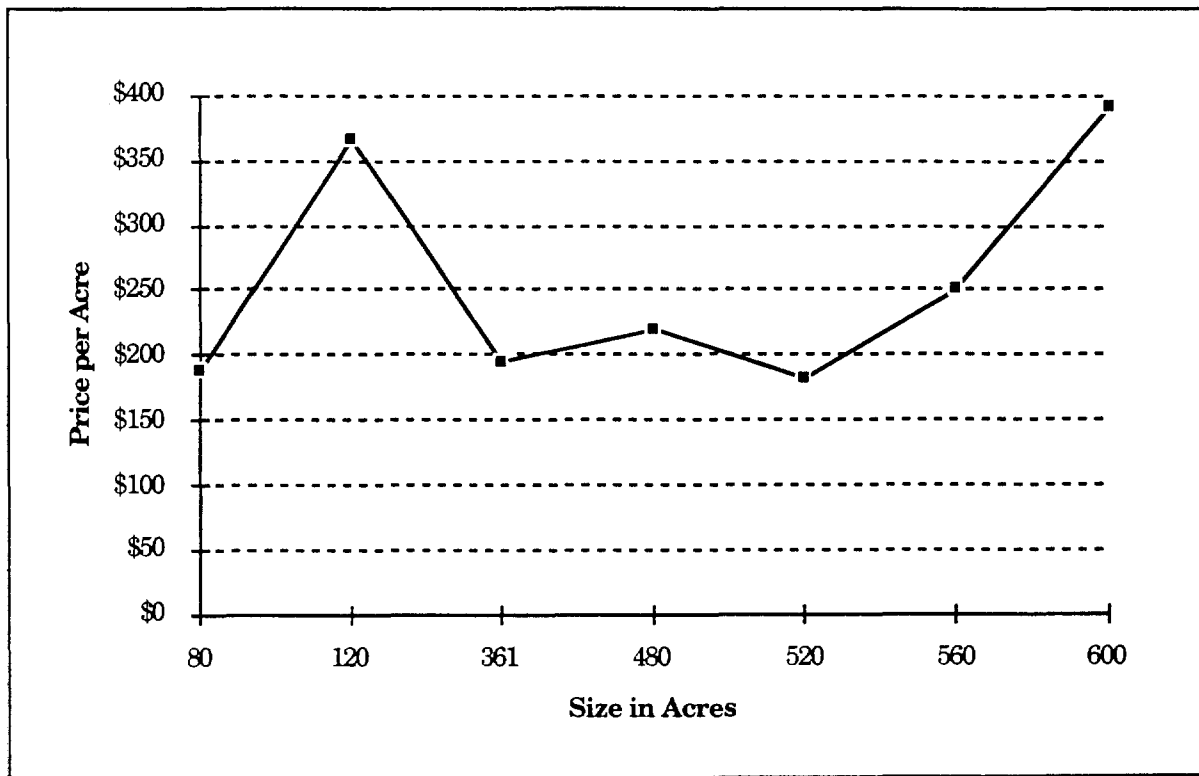
Recognizing the topography of Comparable Nos. 1 and 2 is inferior to that of the subject "key parcel", their per acre indicators (\$863 & \$934) are considered to be below and outside an appropriate range for the subjects. Based on this observation, strategic waterfront sites in remote locales are considered to be fairly represented within a range of per acre values from \$1,000 to \$2,500. Correlating the Work Group's recreation/tourism ratings with this range, the following per acre values are indicated.

Work Group Recreation/Tourism Rating	Indicated \$/Acre
"High" (hypothetical "key parcel")	\$2,500 per acre
"Moderate"	\$1,750 per acre
"Low"	\$1,000 per acre

The Work Group's recreation/tourism) rating for the subject is "moderate" and \$1,750 per acre is considered to be an appropriate value indicator of Strategic Waterfront Sites contained within the boundaries of the subject. However, recognizing that identifiable strategic sites are not subdivided stand-alone properties, it is necessary to adjust the indicated values for size to acknowledge their inclusion into the whole.

Most real estate markets recognize that per acre values decrease as parcel sizes increase. Market derived indicators of adjustments are preferred. However, indicated price-to-size relationships are often erratic - even after considering the relative quality of the properties. Likewise, indicators derived from a relatively large sample of recent data are also inconclusive. Seven sales on the lower Kenai Peninsula have occurred since December of 1991. All are set-back from the highway with no improved access. The transactions are briefly summarized in the following table. Price-to-size relationships are illustrated in a subsequent graph.

#	Area	\$/Acre	Date	Intended Use	Mkt. Exp.
25	80	\$188	Feb-92	n/a	listed 10 mos.
24	120	\$367	Dec-91	subdivision	not marketed
28	361	\$194	May-93	timber	listed 2 mos.
26	480	\$219	Oct-92	subdivision	not marketed
27	520	\$183	Apr-93	timber	listed
29	560	\$250	Aug-93	timber	not marketed
30	600	\$392	Aug-93	homestead	n/a



The indicators are erratic, however, three of the properties (Nos. 27, 28, & 29) were purchased for their timber resources. These transactions reflect a narrow range of indicators from \$183 to \$250 per acre for tracts ranging in size from 361 to 560 acres.

In contrast, a wider range of indicators is reflected by Comparable Nos. 24 and 26. Both were purchased for subdividing - an economic use for which absorption, holding costs, and development costs are primary considerations in the estimation of present value. These transactions provide a more reliable

indicator of the price-to-size relationships likely to be reflected by non-timberlands.

Although neither were exposed to the market, a knowledgeable broker/developer was involved in both purchases. The two properties are generally similar with regard to soils/topography and proximity to roads/electricity. The downward adjustment indicated by a comparison of these two properties is illustrated in the following analysis.

No.	Area	\$/Acre	Adj.
	120 acres	\$367	
	480 acres	<u>\$219</u>	
	Indicated Difference	\$148	
	Indicated Downward Adjustment		-40%

We are not aware of any other "pairs" of recent transactions that are sufficiently similar to yield reliable indicators. The "pair" analyzed reflects a 4 : 1 relationship (480 to 120 acres) - identical to the relationship of 640 acres (1 section) to 160 acres. We have tested the reasonableness of the indicated adjustment (-40%) with a mathematic model that simulates the subdivision and disposition of one section (640 acres). Assumptions are developed in the following paragraphs.

It is difficult for an appraiser to project absorption for a remote coastal area that has generally not been "open" for decades. The data analyzed reflects ten transactions (9 closed) over a seven year period. Their random locations define an unusually large region in relation to the subject's locale. Eliminating aged data, the six transactions that have occurred since 1989 reflect a total absorption of approximately 975 acres - approximately 195 acres per year. Four of those are located in the Kodiak Archipelago. Assuming Comparable No. 10 would have closed, the indicated absorption of 775 acres since 1989 reflects an average of approximately 155 acres per year. The two indicators bracket the unit of comparison used in our analysis (160 acres) and suggest such an average annual absorption is not an unreasonable projection. The subject lands, nor surrounding lands, have not been available in the market and a 160 acre

absorption is not an unreasonable assumption, considering the small percentage of land typically on the market in the Kodiak Archipelago. The absorption of 160 acres per year represents a disposition of 640 acres over a period of four years. As previously noted, 640 acres (1 section) is considered to be the point beyond which further size adjustments will not be applied.

At \$1,750 per acre (mean/median for strategic waterfront sites), annual gross sales are projected at \$280,000 (\$1,750 x 160 acres). No upward pressure on values is anticipated. Costs of sale are estimated at 10%. Survey and administrative costs can be expected to be fairly low and we have allocated \$25 per acre as a miscellaneous cost. Taxes are estimated based on the current mill rate (6.75) times the projected assessed valuation. The assessed valuation is estimated at 50% of the indicated average per acre value (\$1,750 per acre) in order to reflect a consideration for the large-parcel characteristic of the subjects. Net annual sales are discounted by a range of rates considered to be appropriate for low-cost remote recreational subdivisions.

Yr.	Ac.	Gross Sales	Taxes	Devel. Costs	Costs of Sale	Net Sales	PV Disc. @ 14%	PV Disc. @ 16%	PV Disc. @ 18%
1	160	\$280,000	(\$3,780)	(\$4,000)	(\$28,000)	\$244,220	\$214,228	\$210,534	\$206,966
2	160	\$280,000	(\$2,835)	(\$4,000)	(\$28,000)	\$245,165	\$188,647	\$182,198	\$176,074
3	160	\$280,000	(\$1,890)	(\$4,000)	(\$28,000)	\$246,110	\$166,117	\$157,672	\$149,790
4	160	\$280,000	(\$945)	(\$4,000)	(\$28,000)	\$247,055	\$146,276	\$136,446	\$127,428
		\$1,120,000					\$715,268	\$686,851	\$660,258
						Ind. Adj.	36.14%	38.67%	41.05%

The indicated adjustments range from approximately 36% to 41% and suggest that the adjustment indicated by the "pair" of sales (40%) analyzed is not unreasonable. However, recognizing that the extraction and disposition of strategic waterfront sites would require minimal additional upfront capital (no roads or utilities), the low-end adjustment based on the discount rate of 14% is considered to be more appropriate.

Using this model as a foundation (14% discount rate), size adjustments can be calculated to correspond with the amount of strategic waterfront acreage identified within the boundaries of each parcel. If a particular subject parcel has only one identifiable site (160 acres), a marketing period of one year would be reasonably probable and a relatively low size adjustment would be justified. Obviously, longer holding periods would be necessary to dispose of larger quantities of strategic acreage and higher size adjustments would be appropriate.

Size adjustments corresponding to holding periods determined by the amount of acreage are calculated in the following table:

Yr.	Ac.	Gross Sales	Taxes	Devel. Costs	Costs of Sale	Net Sales	PV Disc. @ 14%	Indicated Adjustment
1	160	<u>\$280,000</u>	(\$945)	(\$4,000)	(\$28,000)	\$247,055	<u>\$216,715</u>	
160	Ac.	\$280,000					\$216,715	-23% (rd)
1	160	\$280,000	(\$1,890)	(\$4,000)	(\$28,000)	\$246,110	\$215,886	
2	160	<u>\$280,000</u>	(\$945)	(\$4,000)	(\$28,000)	\$247,055	<u>\$190,101</u>	
320	Ac.	\$560,000					\$405,987	-27% (rd)
1	160	\$280,000	(\$2,835)	(\$4,000)	(\$28,000)	\$245,165	\$215,057	
2	160	\$280,000	(\$1,890)	(\$4,000)	(\$28,000)	\$246,110	\$189,374	
3	160	<u>\$280,000</u>	(\$945)	(\$4,000)	(\$28,000)	\$247,055	<u>\$166,755</u>	
480	Ac.	\$840,000					\$571,186	-32% (rd)
1	160	\$280,000	(\$3,780)	(\$4,000)	(\$28,000)	\$244,220	\$214,228	
2	160	\$280,000	(\$2,835)	(\$4,000)	(\$28,000)	\$245,165	\$188,647	
3	160	\$280,000	(\$1,890)	(\$4,000)	(\$28,000)	\$246,110	\$166,117	
4	160	<u>\$280,000</u>	(\$945)	(\$4,000)	(\$28,000)	\$247,055	<u>\$146,276</u>	
640	Ac.	\$1,120,000					\$715,268	-36% (rd)

Summary

We previously concluded a per acre value of \$1,750 was supportable for a 160 acre strategic site within the boundaries of the subject. Recognizing such sites are not stand-alone parcels, it is necessary to reflect their inclusion into the whole by adjusting the indicated per acre value downward for size. Based on the analysis of size-to-price, downward size adjustments will be applied according to the following schedule:

Quantity of Strategic Waterfront Acreage Identified	Indicated Adjustment
≤ 160 acres	-23%
> 160 but ≤ 320 acres	-27%
> 320 but ≤ 480 acres	-32%
> 480 acres	-36%

According to the Work Group's "Habitat Protection Parcel Analysis", six anadromous streams have been documented while the title report provided reports there are ten. It is likely that more than four strategic sites, and therefore more than 480 acres, could be identified within the boundaries of the subject so that the upper end size adjustment would be appropriate.

Based on these analyses, the per acre value of strategic sites within the boundaries of the subject, adjusted for size to reflect their inclusion into the whole, is calculated as follows:

Indicated Per Acre Value of Strategic Sites rated "Moderate"	\$1,750
Less: Size Adjustment (36%)	(\$630)
Indicate "Bulk" Value of Strategic Waterfront Acreage (per acre)	\$1,120

VALUATION - NON-STRATEGIC WATERFRONT ACREAGE

This component is described as featuring favorable topography but without the strategic quality of a significant geographic/physical feature. This "second tier" acreage may be suitable for a variety of uses but would be at a disadvantage if "strategic" sites are available. A general description of the hypothetical "key parcel" is summarized in the following paragraphs.

Location

The "key parcel" is remote with primary access by float plane. The Work Group's recreation/tourism rating for the locale "high".

Size

Sales of small sites for which further subdividing is not probable, usually do not reflect meaningful per acre indicators as they tend to be evaluated by prospective purchasers on a "per site" basis. Larger units of comparison are more appropriate for our analysis because they are more similar to the subject with regard to possible uses - including further subdividing into more marketable parcels. There is a sufficient quantity of data for parcel sizes approximating 160 acres and we have used this unit of comparison in our analysis.

Shape

An optimum shape is generally described as having extensive water frontage in relation to depth so that further subdividing opportunities are a possibility.

Topography/Soils

Favorable topography/soils is described as moderately sloping with a high percentage of usable uplands. For the purposes of our analyses, topography is considered as favorable when the initial 100 foot contour illustrated on the United States Geological Survey (U. S. G. S) quadrangle maps, is set-back a notable distance from the waterfront so moderately sloping usable terrain is evident.

The data is summarized in the following table. Details of the properties summarized are presented in the addenda of the report.

SUMMARY OF COMPARABLE SALES
NON - STRATEGIC WATERFRONT ACREAGE

#	Region	Neighborhood	Date	Adj. CEV	Acres	\$/AC
11	Southeast	Haines	11-92	\$100,000	153.67	\$651
12	Kenai - lower	Chrome Bay	10-86	\$80,000	69.09	\$1,158
13	Cook Inlet - west	Chinitna Bay	8-90	\$85,101	74.96	\$1,135
14	SW AK.	Eagle Bay, Iliamna	6-91	\$70,000	80.00	\$875
15	SW AK.	Lake Clark	2-94	\$105,000	159.97	\$656
16	SW AK.	Lake Aleknagik	7-93	\$90,000	79.95	\$1,126
17	Kodiak	Uganik Bay	6-86	\$85,500	78.42	\$1,090
18	Kodiak	Afognak Island	11-89	\$1,064,269	273.63	\$3,889
19	Kodiak	Sturgeon River	7-92	\$108,167	159.97	\$676
20	Kodiak	Olga Bay	10-92	\$310,000	180.00	\$1,722
21	Kodiak	Afognak Island	4-94	\$180,000	59.98	\$3,001
22	Kodiak	Uyak Bay USS 9434	listing	\$352,000	159.99	\$2,200

DESCRIPTION OF COMPARABLES

Comparable No. 11 - Chilkat Inlet, Southeastern Alaska (11-92)

This site is located approximately 10 miles south of Haines on the opposite side of the inlet. The site lies within the Haines State Forest and Resource Management Area approximately 1 mile east of the base of Davidson Glacier. Access by small boat is practical but the site lacks protected moorage. The site features a beachfront and fairly level, wooded topography. Merchantable timber, if any, was apparently not a factor and oil/gas rights were not conveyed. The property was purchased for speculation but the most probable use is recreation. However, water frontage in relation to depth is not favorable for extensive subdividing. The property had been listed with a Haines brokerage but the buyers reportedly negotiated directly with the seller.

Comparable No. 12 - Chrome Bay, Lower Kenai Peninsula, Alaska (10/86)

The parcel is located in the Port Chatham area of the Lower Kenai Peninsula. The “recreation/tourism” rating by the EVOS Restoration Team Habitat Protection Work Group for the general locale (ENB08) is “moderate”. Access by boat is from Homer (Kachemak Bay) but the route is exposed to open-ocean.

The parcel features extensive water frontage and was purchased for subdivision into marketable recreation sites. The purchaser has reportedly sold eight lots since 1987. Merchantable timber, if any, was apparently not a factor. The topography is moderately sloping and a high percentage of the acreage is usable. The site had been previously utilized in a mining operation and the mineral rights were conveyed along with the surface estate. The buyer indicated that the acquisition of the subsurface estate effectively eliminated a potential nuisance but no portion of the purchase price was allocated (to the subsurface estate). The purchaser reportedly felt the price was below market and paid the seller’s asking price. However, the offering was exposed to the market with an Anchorage brokerage for approximately six months.

Comparable No. 13 - Chinitna Bay, West Cook Inlet, Alaska (8-90)

Chinitna Bay is located on the west side of Cook Inlet, approximately 45 miles west of Anchor Point. Access by small boat is impractical much of the time due to the expanse of open water that must be crossed. The area (Iniskin Peninsula) is situated within the boundaries of the Kenai Peninsula Borough. The parcel features extensive water frontage and gently sloping wooded terrain. The site was reportedly purchased for a lodge site. Merchantable timber, if any, was apparently not a factor and only the surface rights were conveyed. The offering was advertised for four to six weeks.

Comparable No. 14 - Eagle Bay, Lake Iliamna, Western Alaska (6-91)

Lake Iliamna is a popular fly-in recreation area west of the Alaska Range. At approximately 75 miles in length, Lake Iliamna is the largest fresh-water lake in Alaska and represents the centerpiece of the premier outdoor region generally referred to as "southwestern" Alaska. The area is considered to be a "world class" trophy fishing and hunting area. The site is located at Eagle Bay, six miles east of the community of Iliamna and approximately eight miles east of the airport. The area is characterized by rolling tundra, some of which is semi-wet. However, the site features a good gravel beach and extensive water frontage. As such, it is well-suited for subdividing. There is no merchantable timber in the area and the oil and gas rights were not conveyed. The property had been exposed to the market with an Anchorage broker for approximately nine months.

Comparable No. 15 - North Side of Lake Clark, Western Alaska (2-94)

Lake Clark is located to the north of Lake Iliamna in the fly-recreation area west of the Alaska Range. The area is considered to be a "world class" trophy fishing and hunting area. The site is an inholding within the boundaries of the Lake Clark National Park and Preserve. The site features moderately sloping topography and a gravel beach. Frontage in relation to depth is considered to be average (less than optimum). There is no merchantable timber in the area and the oil and gas rights were not conveyed. The site was acquired for a personal use cabin/home site. The property had been exposed to the market with an Anchorage broker for 38 days.

Comparable No. 16 - Lake Aleknagik, Western Alaska (7-93)

Lake Aleknagik is the lower lake in the Wood River - Tikchik Lakes chain that drains into Bristol Bay at Dillingham in southwest Alaska. The area is considered to be a "world class" trophy fishing and hunting area. The site is situated on the north shore of the lake approximately six miles west of the community of Aleknagik. Access is by float-plane or riverboat. The site features undulating topography and a gravel beach along an extensive shoreline well-suited for subdividing. There is no merchantable timber in the area and the oil and gas rights were not conveyed. The site was acquired for a personal use cabin/home site. The property was exposed to the market via the BIA process. No bids were received during the initial offering and the property was purchased during the subsequent listing period.

Comparable No. 17 - Uganik Bay, Kodiak, Island Alaska (6-86)

Uganik Bay is located on the northwest side of Kodiak Island approximately 30 air miles southwest of the City of Kodiak. Primary access is by floatplane. A marine route from Kodiak would be approximately 95 miles. The locale is outside the areas rated by the Work Group but located between areas with recreation/tourism ratings of "high" (KON01) and "moderate" (AJV06). Topography is reported to be poor but the anchorage good. Water frontage in relation to depth is considered to be average (less than optimum). There is no merchantable timber on the site but the subsurface rights were reportedly conveyed. The purchasers intended use was for a personal residence and commercial fishing support base. The property was not exposed to the market. The transaction was negotiated between friends.

Comparable No. 18 - Raspberry Straights, Afognak Island, Alaska (11-89)

This sale represents an assemblage of two contiguous parcels (127 & 147 acres) fronting on Raspberry Straights approximately 25 air miles northwest of the City of Kodiak. The topography is moderately sloping and the assembled site features extensive water frontage. A small creek runs through the property but the site is not considered strategic. The waters are protected but access is poor at low tide. The estimated value of merchantable timber was reported to be the major component of the purchase price. Only the surface estate was conveyed.

The site was purchased by a Russian religious group formerly known as the Old Believers. The group intended to establish an isolated colony/community and had searched extensively for a site that offered a combination of physical and locational characteristics considered to be optimum. The purchase price was reportedly negotiated prior to any appraisals and the site had not been marketed.

Comparable No. 19 - Sturgeon River, Kodiak Island, Alaska (7-92)

This parcel is situated at the head of a tidal lagoon where the Sturgeon River empties into the Shelikof Strait. The area lies within the boundaries of the Kodiak National Wildlife Refuge on the west side of the Island approximately 90 air miles southwest of the City of Kodiak. The "recreation/tourism" rating by the EVOS Restoration Team Habitat Protection Work Group for the general locale (KON06) is "low". Access by small boat is not practical and float plane access is limited to high tides. The site occupies a bench above the lagoon/river and is suitable for an airstrip. The water frontage in relation to depth is not favorable for extensive subdividing. There is no merchantable timber in the area and only the surface estate was conveyed. The site was purchased for a guided fly-in sportfishing operation. The property had been actively marketed for nearly five years and the eventual purchase price reflected extremely favorable terms.

Comparable No. 20 - Olga Bay, Kodiak Island, Alaska (10-92)

This tract is located on Olga Bay within the boundaries of the Kodiak National Wildlife Refuge approximately 85 miles southwest of the City of Kodiak. The "recreation/tourism" rating by the EVOS Restoration Team Habitat Protection Work Group for the general locale (AKI06) is "high". The site offers extensive beachfront in a small semi-protected bay but access is complicated at low tide. Approximately 30% to 40% of the backlands are reported to be poorly drained. There is no merchantable timber in the area and only the surface estate was to be conveyed. The site was intended for a fishing lodge operation. The property had been exposed to the market with a Kodiak brokerage for approximately 5 weeks. The purchase terms required approximately one-third down (\$100,000). The buyer was not able to close and the transaction fell through.

Comparable No. 21 - Afognak Island, Alaska (4-94)

The site is located on the southeasterly shore of Afognak Island fronting on Kupreanof Strait approximately 25 air miles northwest of the city of Kodiak. The topography is fairly level and the site has no water frontage. The availability of legal access from the waterfront is in question as of the date of this report. The estimated value of merchantable timber was reported to be the major component of the purchase price. Only the surface estate was conveyed.

The site was purchased by a Russian family with ties to the Old Believer colony nearby (Comparable No. 18). In spite of the site's shortcomings, it was the most proximal of available alternatives at the time. The property had not been exposed to the market. The availability of the site was communicated by word of mouth.

Comparable No. 22 - Uyak Bay, Kodiak Island, Alaska (listing)

Uyak Bay is located on the northwest side of Kodiak Island. Primary access is by floatplane. A marine route from Kodiak would be in excess of 100 miles. The site is located within the boundaries of KON02, a parcel with a Work Group recreation/tourism rating of "high". Topography is moderately steep and the shoreline features a gravel beach and extensive frontage suitable for subdividing. A small cove offers protected moorage for floatplanes and/or small boats. The ratio of water frontage to depth is less than optimum but suitable for subdividing. There is no merchantable timber in the area and only the surface estate is offered. The property was exposed to the market via the BIA process. No bids were received during the initial offering and the property is currently listed for sale.

EXPLANATION OF ADJUSTMENT PROCESS

Financing Terms

The Adjusted Cash Equivalent Value reported in the table reflects previous considerations for terms of sale and allocations for improvements or non-realty components if any (see detailed "Comp Sheets" in addenda).

Market Conditions (sale date)

Sales occurring prior to 1986 have little relevance except to establish a decline in "market" values (see Market Overview). All of the transactions summarized and analyzed occurred since mid-1986. The data reflects only spotty activity over a lengthy period of approximately 8 years. An adjustment for market conditions (time) during this period is not supported by the data and we have made no adjustment.

Conditions of Sale (motivation)

Undue stimulus and/or atypical influences, if any, are considered in the Reconciliation of Adjustments.

Real Property Rights Conveyed

The purpose of this appraisal is to estimate the market value of the fee simple interest - less oil, gas, and minerals, (surface estate). Most of the comparables reflect the conveyances of only the surface estate. If an allocation for the inclusion of subsurface rights can be determined by interviews with the buyers and sellers, downward adjustments will be made.

Zoning

The subject properties and those comparables located on Kodiak Island are subject to Borough zoning regulations. However, the zoning regulations do not adversely impact probable utilizations and we have made no adjustment.

Physical Features and Characteristics

Physical features and characteristics include; location, access; soils and topography; size and shape. Although ten transactions have been analyzed, they reflect only spotty activity over a period of approximately seven years. Due to the limited amount of data, it is extremely difficult to identify and apply reliable adjustments for various physical features and characteristics. Therefore, we

have correlated the comparables to the subject in a qualitative analysis described by the Appraisal of Real Estate Tenth Edition as a "Relative Comparison Analysis". In this analysis, various physical features and characteristics are perceived as comparable/equal, superior or inferior. This technique illustrates the relative market position of the subject. A Market Data Grid and Relative Comparison Analysis is presented on the following page.

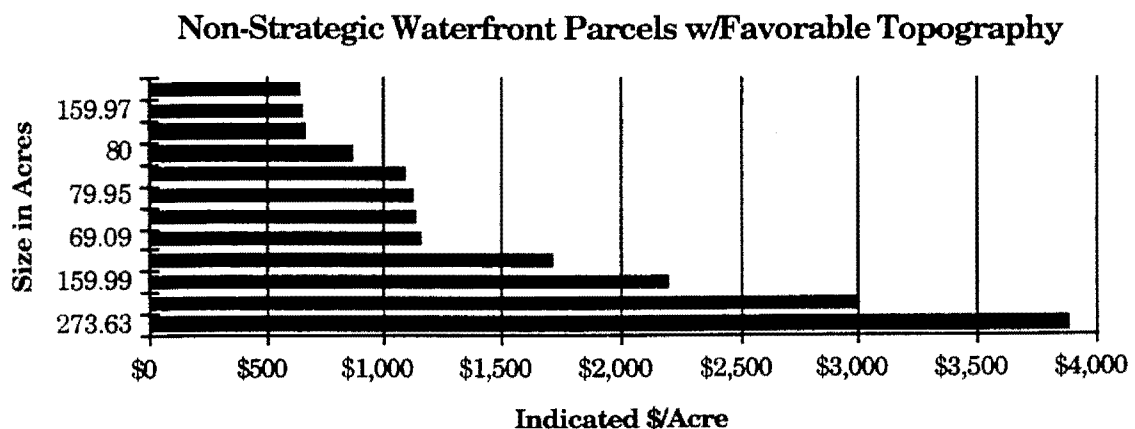
16	17	18	19	20	21	22
\$1,126	\$1,090	\$3,889	\$676	\$1,722	\$3,001	\$2,200
7-93	6-86	11-89	7-92	10-92 offer	4-94	avail. listing
(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)
no known undue stimulus or duress	no known undue stimulus or duress	see reconciliation	no known undue stimulus or duress	no known undue stimulus or duress	see reconciliation	no known undue stimulus or duress
(no adjust.)	(no adjust.)		(no adjust.)	(no adjust.)		(no adjust.)
Fee Simple Surface Estate	Fee Simple including subsurface	Fee Simple Surface Estate	Fee Simple Surface Estate	Fee Simple Surface Estate	Fee Simple Surface Estate	Fee Simple Surface Estate
(no adjust.)	(not allocated)	(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)	(no adjust.)
\$1,126	\$1,090	\$3,889	\$676	\$1,722	\$3,001	\$2,200
Lake Aleknagik, SW Alaska	Uganik Bay, Kodiak Isl.	Raspberry Straights, Afognak Isl.	Sturgeon River, Kodiak Isl. Alaska	Olga Bay, SW Kodiak Isl. Alaska	Kupreanof Straights, Afognak Isl.	Uyak Bay, Kodiak Isl. Alaska
< 10,000	< 20,000	< 20,000	< 20,000	< 20,000	< 20,000	< 20,000
25 miles +/-	95 miles +/-	50 miles +/-	120 miles +/-	150 miles +/-	50 miles +/-	100 miles +/-
none	much of route	much of route	most of route	most of route	much of route	much of route
"high" (appraiser)	"mod.-high" (appraiser)	"moderate" (appraiser)	"low" (Work Group)	"high" (Work Group)	"mod.-high" (appraiser)	"high" (Work Group)
(approx. =)	(inferior)	(inferior)	(inferior)	(approx. =)	(inferior)	(approx. =)
79.95 acres	78.42 acres	273.63 acres assemblage	159.97 acres	180.00 acres	59.98 acres	159.99 acres
(superior)	superior)	(equal)	(equal)	(approx. =)	(superior)	(equal)
optimum for subdividing	not favorable for subdividing	favorable for subdividing	not favorable for subdividing	favorable for subdividing	not favorable for subdividing	favorable for subdividing
(approx. =)	(inferior -)	(inferior)	(inferior) -	(inferior)	(inferior -)	(inferior)
moderate slope	steep slope	moderate slope	fairly level bench	fairly level	fairly level	steep slope
high% of usable uplands	low to moderate % of usable uplands	high% of usable uplands & timber	high % of usable uplands	moderate % of usable uplands	moderate % of usable uplands & timber	low to moderate % of usable uplands
protected lake shore	protected	protected	protected	semi-protected	unprotected	protected
(approx. =)	(inferior)	(superior)	approx. =)	(inferior)	(superior)	(inferior)
personal recreation	personal multi- use	colony	commercial recreation	commercial recreation	colony	n/a
Approx. =	Positive	Negative	Positive	Negative	Negative	Negative

Reconciliation of Adjustments

The sales price indicators and the indicated overall adjustments are summarized as follows:

No.	Location	Date	Acres	\$/AC	Net Adjust.
18	Raspberry Strait Narrows, Afognak	11-89	273.63	\$3,889	Negative
21	Kupreanof Strait, Afognak Island	4-94	59.98	\$3,001	Negative
22	Uyak Bay, Kodiak Island	avail.	159.99	\$2,200	Negative
20	Olga Bay, SW Kodiak Island	10-92	180.00	\$1,722	Negative
12	Chrome Bay, Lower Kenai Peninsula	10-86	69.09	\$1,158	Approx. =
13	Chinitna Bay, West Cook Inlet	8-90	74.96	\$1,135	Approx. =
16	Lake Aleknagik, SW Ak.	7-93	79.95	\$1,126	Approx. =
key parcel	Southwest Kodiak Island	n/a	160.00	-----	-----
17	Uganik Bay, NW Kodiak Island	6-86	78.42	\$1,090	Positive
14	Eagle Bay, Lake Iliamna, SW AK.	6-91	80.00	\$875	Positive
19	Sturgeon River, SW Kodiak Isl. Ak.	7-92	159.97	\$676	Positive
15	Lake Clark, SW AK.	2-94	159.97	\$656	Positive
11	Haines, SE AK.	9-92	153.67	\$651	Positive

The comparables analyzed reflect a wide range of per acre indicators - from \$649 to \$3,889. The spread is illustrated in the following graph.



Eight of the twelve comparables are fairly consistent, falling within a range from \$649 to \$1,158 per acre. Four of the comparables are sufficiently outside the range that the reliability of their indicators (\$1,722 to \$3,889) is suspect.

Comparable Nos. 18 and 21 represent the extreme deviations from any market “norms” indicated by the remainder of the data. Comparable No. 18 represents the upper-end indicator for a non-strategic waterfront site. While the site may have been well-suited for the intended use, the price is not supported by other data that qualifies as adequate for purposes of estimating market value. The negotiated price appears to have resulted from a combination of influencing factors.

First, there were reportedly few alternatives that were equally suitable for their intended use. However, the buyers’ criteria was atypical. The presumption that “scarcity” justifies a premium cannot be applied to the valuation of thousands of acres.

Second, merchantable timber was reported to be the major component of price. While the buyers did not intend to log the site, the presence of this resource would clearly have an impact on negotiations. Even if the buyer did not intend a commercial harvest, the timber represented an on-site source of building materials, firewood, etc. Also, a knowledgeable seller would expect a premium above the market norms reflected by the sales of non-timbered lands.

Third, the buyer’s knowledge of the market is suspect. The property was not exposed to the market. And, available market data indicates that only a nominal value, if any, can be justified for cutover timberland. While the BIA was not in a position to confirm the estimated timber value, reports by other appraisers have pegged the timber component at approximately \$717,000. Such an allocation would leave the cutover land component to justify a value of more than \$1,000 per acre - an indicator wholly unsupported in the marketplace.

Comparable No. 21 reflects the second highest per acre indicator yet it is not a waterfront site. Like Comparable No. 18, a stand of merchantable timber was a substantial component of the negotiated price and it would be meaningless to attempt to correlate the sale to the subject properties. Nevertheless, the property had not been exposed to the market and the purchase price appears to be above-market - particularly given the per acre prices indicated by the sales of waterfront parcels. Aside from the significance of the timber component, the site is dramatically inferior in terms of physical features and characteristics to

virtually all of the other comparables analyzed. The site did not have access to/from the waterfront and the legality of the negotiated access is currently in question. A location proximal to Comparable No. 18 was a primary motivator and the purchaser reportedly had few, if any, suitable alternatives from which to choose.

Although both of these transactions represent closed sales resulting from arm's length negotiations, neither are relevant to the valuation of the subject. First, as land with merchantable timber, they are not similar to the subjects. Second, further colonization by this group, if any, is likely to occur in the same area. In other words, the subject neighborhood is not likely to benefit from the emergence of this small market segment. Finally, without market exposure, there is no assurance of an optimization process toward the free and open market norms suggested by the other data. In summary, no weight can be given to these transactions in the final analysis of the subject "key parcel".

Comparable No. 22 represents an available listing. While the parcel has many desirable attributes, data from the previous analysis suggests that only geographically/physically strategic parcels can be expected to realize such a price after a reasonable exposure period. Negotiated prices are most often for less than the asking price and no weight can be given this comparable. The upper end of an appropriate range for the subject is suggested by the remaining data.

Comparable No. 20 was reported as an agreement to purchase that failed to close because the buyer could not perform. A price of \$310,000 (\$1,722/acre) was to be paid with a large down (\$100,000) and an amortized balance over 21 years (approx.) at 10%. Negotiations were arm's length and the offer followed a market exposure period. The buyer was knowledgeable and the site was to be acquired for an economic use. However, any consideration of the offer must be tempered by an acknowledgment the transaction failed to close and all of the other data reflects lower per acre indicators. Based on these observations, Comparable No. 20 can only represent the extreme upper-end of an appropriate range for the subject.

The remaining eight comparables reflect a range of per acre indicators from \$651 to \$1,158 and suggest two distinct stratas of value related to size. Five parcels

ranging in size from approximately 70 to 80 acres reflect a value range from \$875 to \$1,158 per acre. Three parcels ranging in size from approximately 154 to 160 acres reflect a value range from \$651 to \$676 per acre. The average per acre indicator of the three larger tracts is nearly 40% less than the average of the five smaller tracts. Based on these observations, it is not unreasonable to conclude that significant concessions are necessary to dispose of acreage in denominations of 160 acres. Non-strategic acreage, even with favorable topography, is less likely to attract large commitments of capital in relation to strategic sites that are suitable for the greatest number of alternative uses.

However, the significance of the indicated size-to-price relationship is diluted by further review of the data. The low-end of the range is represented by Comparable No. 11. The parcel is not well-suited for subdividing and the water frontage is exposed to open ocean - inferior characteristics. Comparable No. 15 reflects a similar low-end indicator. The water frontage to depth ratio is less than optimum for subdividing. Furthermore, the seller accepted an offer after only 38 days on the market. The broker confirmed the seller was somewhat motivated and a higher sales price would probably have been achievable with a longer marketing period. Although both of these parcels contained approximately 160 acres, their per acre indicators are below an appropriate range for the subject.

Comparable No. 19 is another 160 (+/-) parcel but located in the same general locale as the subject. It represents a recent acquisition by a developer/entrepreneur after the offering had been exposed to the market. The site is similar in size to the subject but inferior with regard to shape (not favorable for subdividing) and location (rated "low" by the Work Group). Based on these features and characteristics, the indicated per acre value of \$676 is considered to be below an appropriate range for the subject. A nominal upward adjustment of 10% to 20% for these deficiencies would indicate a per acre value range from \$744 to \$811 for a 160 parcel. Based on these observations, \$800 per acre is considered to be the low-end of an appropriate range within which the subject is fairly represented.

An appropriate upper-end indicator is represented within a narrow range established by Comparable Nos. 12, 13, and 16 - \$1,126 to \$1,158 per acre. Although all are smaller than the 160 acre unit of comparison (key parcel), various inequalities tend to offset size considerations so that an upper-end value of \$1,150 per acre is supportable for a 160 acre parcel exhibiting a favorable combination of positive attributes (key parcel).

Correlation of the Key Parcel

Comparable Nos. 12, 13, 16, and 19 establish a tight range of value from \$800 to \$1,150 per acre for non-strategic 160 acre parcels featuring favorable topography. The indicated per acre values reflect the influence of numerous variables. As such, the isolation of reliable considerations for location, size, and other physical features and characteristics would be extremely difficult. In order to recognize the relationship of the various locales of the subjects to each other, we have correlated the Work Group's recreation/tourism ratings with the indicated range of values. The indicated values are summarized as follows:

Work Group Recreation/Tourism Rating	Indicated \$/Acre
"High" (hypothetical "key parcel")	\$1,150 per acre
"Moderate"	\$975 per acre
"Low"	\$800 per acre

The Work Group's recreation/tourism) rating for the subject is "moderate" and \$975 per acre is considered to be an appropriate value indicator for this component. Recognizing this acreage does not represent a stand-alone component, it is necessary to reflect its inclusion into the whole by adjusting the indicated per acre value downward for size.

In the previous analysis, progressive size adjustments were developed depending on the quantities of component. Based on the extent of the subject's shoreline that could be so categorized, the upper end size adjustment would be appropriate (36%). The size adjustments were based on an analysis in which absorption is projected at 160 acres per year. However, three of the non-strategic comparables located in the Kodiak Archipelago (Nos. 18, 19, & 21) reflect an average annual absorption of only 100 acres (+/-) over the past five years. On the other hand,

eight closed sales (Nos. 11, 13, 14, 15, 16, 18, 19, & 21) that have occurred during the past five years (including Kodiak transactions) indicate an average annual absorption of approximately 210 acres.

The indicators are inconclusive and we recognize that the data used in our analysis does not represent all of the acreage absorbed. Furthermore, absorption is sensitive to numerous variables including the availability of acreage in areas that have been essentially "closed" for decades. Nevertheless, it is not unreasonable to conclude that the absorption of non-strategic waterfront acreage would be slower than the absorption of strategic sites and downward adjustments of greater magnitude would be appropriate. For the purposes of our analysis, we have made a downward adjustment of 40%.

Based on these analyses, the per acre value of this component, adjusted for size to reflect its inclusion into the whole, is calculated as follows:

Indicated Per Acre Value of Non-Strategic Waterfront featuring favorable topography rated "Moderate"	\$975
Less: Size Adjustment (40%)	(\$390)
Indicate "Bulk" Value of Strategic Waterfront Acreage (per acre)	\$585

**VALUE ESTIMATE -NON-STRATEGIC WATER FRONTAGE FEATURING
UNFAVORABLE TOPOGRAPHY
& CONTIGUOUS BACKLANDS**

Traditional land use patterns in coastal environments reflect concentrations along the waterfront. Individual Native allotments in coastal areas have been selected along the waterfront with rare exception - most often in protected waters near reliable food resources. The sales histories of remote waterfront subdivisions in most Alaskan locales confirm that demand for non-waterfront sites/parcels is little to none. Based on these observations, it is not unreasonable to conclude that remote backlands have only a nominal value in relation to waterfront land. However, rugged topographical features render much of the waterfront acreage of no more utility than that of non-timbered backlands. This third component is described as "non-strategic water frontage featuring unfavorable topography and contiguous backlands".

Adequate market data for truly similar remote Alaska properties is nearly non-existent. As a result, a direct comparison of "comparables" is not practical and a narrative evaluation is necessary. In this narrative, we have used data from various submarkets to identify, and then narrow, ranges considered to be appropriate for the value of the subject.

The Lower Kenai Peninsula offers Alaska's best example of a free open market for sizable tracts of acreage. The sales summarized in the following table reflect an active market with numerous buyers and sellers. All are generally similar in that they have no improved access nor electricity. The properties were acquired for a variety of uses.

#	Location	Date	Adj. CEV	Acres	\$/AC	Intended Use
23	Anchor Point	8-90	\$450,000	2,220	\$203	recreation subdivision
24	Anchor Point	12-91	\$44,000	120	\$367	rural residential subdivision
25	Happy Valley	2-92	\$15,000	80	\$188	rural homesite
26	Anchor Point	10-92	\$105,000	480	\$219	recreation subdivision
27	Anchor Point	4-93	\$95,000	520	\$183	selective logging & subdivision
28	Anchor Point	5-93	\$70,000	361	\$194	selective logging & subdivision
29	Anchor Point	8-93	\$140,000	560	\$250	selective logging & subdivision
30	Homer	8-93	\$235,000	600	\$392	farm/ranch homestead

The properties are sufficiently different from the subject that a direct comparison of numerous physical features and characteristics is not practical nor necessary. However, the data is meaningful because it establishes a range of per acre indicators - for sizable tracts of land that are suitable for uses that assure a degree of marketability. The comparables reflect a range of per acre values from \$183 to \$392 per acre. Indicators reflected by these eight recent transactions are summarized in the following table:

Range	\$183 to \$392 per acre
Mid-Point of the Range	\$288 per acre
Mean	\$250 per acre
Median	\$211 per acre
6 of the 8 reflect indicators of	\$250 per acre or less
5 of the 8 fall within a narrow range from	\$183 to \$219 per acre

Comparable Nos. 23 through 30 are located in close proximity to the State highway system that serves nearly 300,000 residents of Southcentral Alaska. Electricity lines and community services are nearby. Given the unusable nature of the majority of the subject's acreage (steep terrain, remote), a general range of \$200 to \$400 must be considered to be above an appropriate range for the subject.

The overwhelming majority of the subject's non-strategic waterfront and contiguous backlands consists of terrain - generally unsuitable for any economic use. "Speculation" fairly describes the current Highest and Best Use of property types unsuitable for any other economic use - most wetlands, featureless tundra, mountains, and cut-over timberland. For such property types, economics dictate that only casual gambles of surplus capital can be justified for potential not likely to be realized in our lifetimes. The present value (investment) that can be justified for distant potential benefits is simply not measurable and only a nominal value may be supportable.

Cut-over timberland, not in the path of encroaching residential or commercial development, may not be productive until trees near maturity - more than 50 years from re-seeding. Yet cut-over timberland may offer the most promising speculative prospects. At least the resource should regenerate given time.

The data in the following table reflects the perceptions of buyers of Alaska timberlands. Interviews with the purchasers reflect a range of indicators typically allocated to cut-over land.

SUMMARY OF COMPARABLE SALES CUTOVER TIMBERLAND ALLOCATIONS

#	Location	Date	Adj. CEV	Perceived Value of Timber	Acres	Residual Allocated to Cut-over Land
31	Prince of Wales Isl. in SE AK	1-89	\$650,000	\$650,000	138.60	\$0
32	Wadleigh Isl. near Klawock in SE AK	7-89	\$1,000,000	\$1,000,000	623.43	\$0
33	Edna Bay near Wrangell in SE AK	7-89	\$400,000	\$400,000	512.00	\$0
34	Johnson Creek near Juneau in SE AK	5-91	\$125,000	\$125,000	229.10	\$0
35	Copper Harbor in SE AK	12-91	\$800,000	\$800,000	340.70	\$0
36	Fidalgo Bay near Valdez in PWS	4-92	\$92,000	\$52,000	264.18	\$50 to \$100
37	Gravina Island in SE AK	2-93	\$347,000	\$347,000	190.40	\$0 to \$100

The data reflects a range of indicators from \$0 to \$100 per acre for cut-over timber land - a range of nominal values for land not likely to be productive or otherwise provide utility for an extended term.

We recognize that low allocations of value to cut-over land serve to minimize holding costs (taxes) for cut-over land. However, the available data indicates that market prospects for cut-over land are extremely poor and it is not unreasonable for buyers of Alaska timberlands to expect a satisfactory return of, and on, their investment - from the stumpage alone. The fact that the sellers did not retain ownership of the cut-over land supports the allocation.

Nevertheless, a zero value allocated to cut-over land is unrealistic. Remote speculative land in Alaska would have at least a novelty value. If nothing else, the future potential for cut-over land, however limited, represents a bonus or incentive that may cushion or minimize the risk of a volatile timber industry. It is not uncommon for timber volumes to prove less than original estimates.

Mr. Larry Blydenstein of MRGC Timberland (Comparable No. 37) indicated that \$100 per acre would represent the upper-end of a range of speculative values that could be attributed to remote cut-over land in Alaska. Mr. Rice, of Citigreen Inc. (Comparable No. 36) reported that his company usually assumes a residual value of between \$50 and \$100 per acres. Mr. Claire Doig, of Forest and Land Management Inc., (Seattle) is familiar with Comparable No. 36 and indicated that \$100 would represent the extreme high-end value that could be attributed to the cut-over land. The lengthy regeneration cycle typical of Alaska's timber and the lack of a market for cutover land (in Alaska) were cited as limiting factors.

The indicated range of \$50 to \$100 per acre is bracketed by the analysis of the recent acquisition of timberlands by the EVOS Trustee Council at Seal Bay and Tonki Cape on Afognak Island. The analysis reflects a range of values allocated to the cut-over timberland from \$0 to \$128 per acre depending on perspective. However, acknowledging the net result of the transaction, the upper-end of this range is not supportable.

In summary, it is not unreasonable to conclude that \$50 to \$100 per acre is an appropriate range of nominal values within which this third component is fairly represented. This range is supported by a recent lease of a large tract in the Matanuska-Susitna Borough (Southcentral Alaska) for a major ski resort. Comparable No. 38 is summarized in the following table.

#	Region	Neighborhood	Date	Adj. CEV	Acres	\$/AC
38	Southcentral	Hatcher Pass	1993	\$1,330,000	10,634	\$125

The transaction provides a meaningful indicator because the lessee is a private sector entrepreneur/developer. Furthermore, although not conventionally marketed, land in Hatcher Pass has generally been available for several years. Over the past twenty years, several projects have been proposed by various entrepreneur/developers. The lease provides a relevant indicator of a "base" value of land generally unsuitable for most economic uses. There is no merchantable timber on the property and much of the terrain consists of mountain slopes. The per acre indicator of \$125 per acre is illustrative of large-scale land-use economics in Alaska.

However, in a direct comparison with the subject, a downward adjustment would be appropriate. First, the location of the tract is dramatically superior to the subject. The area is already established as a popular outdoor recreation area that can be accessed by vehicle. The population base within a 50 mile radius exceeds 260,000. Secondary and peripheral opportunities will be plentiful if the resort is developed as proposed.

Second, the value indicator for the overall tract (10,634 acre) reflects the impact of strategic sites suitable for commercial and residential development. In this analysis, we are seeking only the value of the non-strategic acreage. Higher value components have been valued in previous sections.

Finally, although an agreement has been reached, the entrepreneur/developer has not been able to raise the capital necessary to undertake the proposed project. In summary, the indicator derived from the negotiated lease supports the lower range previously indicated - \$50 to \$100 per acre.

Summary

Based on our analyses and observations, it is our opinion that the value of this component is fairly represented within a range from \$50 to \$100 per acre.

We acknowledge that there is a nominal price that someone would pay, even for non-productive land not likely to be suitable for any economic use for an extended term (other than speculation). However, it is difficult to further narrow this range.

On one hand we recognize the limitations imposed by remoteness, rugged topography, and harsh climatic conditions. Based on these observations, the low-end of the range may be more realistic. On the other hand, the price level that might attract speculative, if not novelty, investments in large tracts of remote Alaska acreage (say, ≥ 640 acres - 1 section), generally unsuitable for most economic uses, has not been suggested by any market "test" that we are aware of. Marketed offerings of remote Alaska land in large denominations are extremely rare - let alone revealing cases where the property is allowed to remain on the market, at periodically reduced prices, until its purchase can be justified by a private sector buyer.

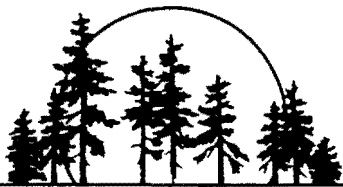
In conclusion, it is our opinion that \$100 per acre is an appropriate estimate of the nominal value of the subject's "non-strategic waterfront acreage featuring unfavorable topography and contiguous backlands". We have made no adjustment for size as the indicated nominal value was derived from Comparables reflecting a range of parcel sizes that included bulk acreage.

SUMMARY OF PER ACRE VALUE INDICATORS

Representative component values are summarized in the following table.

	Supportable "bulk" value of non-timberland
Strategic Waterfront Sites (to an average depth of 1/4 mile)	\$1,120 per acre
Non-Strategic Waterfront Acreage Featuring Favorable Topography (to an average depth of 1/4 mile)	\$585 per acre
Non-Strategic Waterfront Acreage w/Unfavorable Topography & Backlands	\$100 per acre

ESTIMATE OF VALUE
(merchantable timber)



PACIFIC FOREST CONSULTANTS INC.

200 N. EDWARDS
NEWBERG, OR 97132
FAX 503 537-9320

PORTLAND 503 537-9300 • LONGVIEW 206 577-4906

October 7, 1994

Mr. Richard Goossens
Regional Appraiser
USDA, Forest Service
P.O. Box 21628
Juneau, AK 99801

RE: Transmittal of Shuyak Timber Appraisal Report, and Shuyak Timber Inventory Addendum.

Dear Rich:

Enclosed please find three copies of our *Shuyak Island Timber Appraisal Report*, and two copies of our Addendum to the *Timber Inventory - Shuyak Island*.

Per your instructions I have "Gold Streaked" a copy of the Appraisal to Mr. Jerome Selby of the Kodiak Island Borough, and have mailed a copy of the Addendum to Mr. Neil Hart of Wesley Rickard, Inc.

The Addendum addresses a processing problem, along with other editing, and includes pages that are intended to be replace orgininal pages of the inventory reports.

Please call if you have any questions regarding this material.

Sincerely,

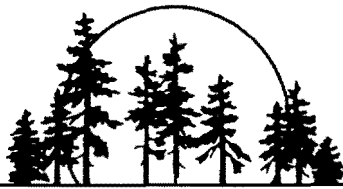
Timothy R. Manley

Forester

Oregon Certified General Appraiser

encls.

wp_docs\alaska\goossens.8



PACIFIC FOREST CONSULTANTS INC.

200 N. EDWARDS
NEWBERG, OR 97132
FAX 503 537-9320

PORTLAND 503 537-9300 • LONGVIEW 206 577-4906

TIMBER APPRAISAL SHUYAK ISLAND

26,624 Acres

Kodiak Island Borough, Alaska

Effective Date: September 1, 1994

Total Appraised Value: \$24,000,000.00
(\$901.44/acre, \$110.96/MBF)

Submitted: November 16, 1994

Prepared by: Timothy R. Manley

Property inspections, data collection and analysis performed by: Timothy R. Manley,
Todd Hansen, Dennis Callegari, Brad Bailey, and Eric Haller.

TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY OF SALIENT FACTS	1
II. ASSUMPTIONS AND LIMITING CONDITIONS	2
A. Limit of Liability	2
B. Copies, Publications, Distribution, Use of Report	2
C. Confidentiality	2
D. Trade Secrets	2
E. Information Used	3
F. Testimony and Completion of Contract Appraisal Services	3
G. Exhibits	3
H. Legal Engineering, Financial or Mechanical, Hidden Components, Soil	3
I. Legality of Use	4
J. Inclusions	4
K. Proposed Improvements, Conditioned Values	5
L. Value Change & Alteration of Estimate by Appraiser(s)	5
M. Management of Property	5
N. Changes and Modifications	5
O. Timber Inventory	5
P. Threatened and Endangered Species	5
Q. Export Restrictions	6
R. Acceptance of Appraisal	6
III. OBJECTIVE OF THE APPRAISAL	7
A. Purpose	7
B. Function	7
C. Definition of Market Value	7
D. Property Rights Appraised	8
E. Present Ownership	8
F. Date of Value Estimate	8
G. Legal Description	8
IV. MARKET AND AREA ANALYSIS	11
A. The Timber Market	11
1. The Land & Timber Owners	13
a. Alaska Native Corporations	13
b. Other Private Landowners	13
c. Federal, State and Local Government	13

TABLE OF CONTENTS

	<u>Page</u>
2. Timber Buyers	14
3. Characteristics that Influence Value	14
a. Supply of Timber	14
b. Demand for Timber	16
c. Physical Characteristics	17
d. Political Constraints	18
e. Relative Location of Subject Timber	19
4. Log Market	19
 V. DESCRIPTION OF THE SUBJECT TIMBER	 21
A. Forest Resource	21
B. Topography and Logging Systems	22
C. Transportation Systems	22
 VII. THE PRICE - VALUATION PROCESS	 24
A. Sales Comparison Approach	24
B. Income Approach	24
1. Merchantable Timber Type Analysis	25
a. First Screening	25
b. Second Screening	26
c. Final Screening	29
2. Harvest Plan & Cash Flow Analysis	31
C. Cost Approach	34
D. Reconciliation of Approaches	35
E. Final Estimate of Value	35
 IV. CERTIFICATE OF APPRAISER	 36
 APPENDIX A - Draft Title Report; Shuyak Island Acquisitions	
APPENDIX B - Type Feasibility Analysis; First Screening Spreadsheets	
APPENDIX C - Type Feasibility Analysis; Second Screening Spreadsheets	
APPENDIX D - Type Feasibility Analysis; Final Harvest Plan	
APPENDIX E - Production Costs Appraisal Worksheets	

I. SUMMARY OF SALIENT FACTS

<u>Timber Ownership:</u>	Kodiak Island Borough	
<u>Property Name:</u>	Shuyak Island.	
<u>Location of Property:</u>	Shuyak Island, South Central Alaska, 50 miles North of Kodiak, Alaska.	
<u>Property Acreage:</u>	26,624 acres.	
<u>Property Description:</u>	Marine to subalpine environments. Approximately 80 percent of which is timberland, comprised of old growth Sitka spruce.	
<u>Interest Being Appraised:</u>	Fee simple timber rights, including rights to harvest and construct harvest related improvements.	
<u>Improvements:</u>	None.	
<u>Effective Date of the Appraisal:</u>	September 1, 1994.	
<u>Estimates of Value:</u>	Cost Approach	Not Applicable.
	Income Approach	\$24,000,000.00
	Sales Comp. Approach	Not Applicable.
<u>Final Estimate of Value:</u>	\$24,000,000	

II. ASSUMPTIONS AND LIMITING CONDITIONS

The following limiting conditions are material to this analysis:

A. Limit Of Liability: The liability of the appraiser and employees is limited to the client and to the fee collected. Further, there is no accountability, obligation, or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of limiting conditions and assumptions of the appraisal. The Appraiser assumes no responsibility for any costs incurred to discover or correct any deficiencies of any type present in the property; physically, financially and legally.

B. Copies, Publications, Distribution, Use of Report: Possession of this report or any copy thereof does not carry with it the right of publication, nor may it be used for other than its intended use; the physical report remains the property of the appraiser for the use of the client; the fee being for the **analytical services only**.

The Bylaws and Regulations of the American Society of Farm Managers and Rural Appraisers requires that each Member or Candidate control the use and distribution of each appraisal report signed by such Member or Candidate. Except as hereinafter provided, the client may distribute copies of this appraisal report in its entirety to such third parties as he may select, however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatory of this appraisal report. Neither all nor any part of this appraisal report shall be disseminated to the general public by use of advertising media, public relations, news, sales or other media for public communication without the prior written consent of appraiser.

C. Confidentiality: This appraisal is to be used only in its entirety and no part is to be used without the entire report. All conclusions and opinions concerning the analysis set forth in the report were prepared by the Appraiser whose signature appears on the report, unless indicated as "Review Appraiser". No change of any item in the report shall be made by anyone other than the Appraiser. The Appraiser shall have no responsibility if any such unauthorized change is made.

The Appraiser may not divulge the material (evaluation) contents of the report, analytical findings or conclusions, or give a copy of the report to anyone other than the client or his designee as specified in writing except as may be required by the American Society of Farm Managers and Rural Appraisers as they may request in confidence of ethics enforcement, or by court of law or body with the power of subpoena.

D. Trade Secrets: This appraisal was obtained from Timothy R. Manley, of Pacific

Forest Consultants, Inc., Oregon Certified Appraiser and Forester and consists of "trade secrets and commercial or financial information" which is privileged and confidential and exempted from disclosure under 5 U.S.C. 552 (b) (4). Notify the appraiser signing the report of any request to reproduce this appraisal in whole or part.

E. Information Used: No responsibility is assumed for accuracy of the information furnished by the work of others, the client, his designee, or public records. The appraiser is not liable for such information. The comparable data relied upon in this report has been confirmed with one or more parties familiar with the transaction or from affidavit or other sources thought reasonable; all are considered appropriate for inclusion to the best of the appraiser's factual judgement and knowledge. An impractical and uneconomic expenditure of time would be required in attempting to furnish unimpeachable verification in all instances, particularly as to timber inventory and market related information. It is suggested that the client consider independent verification as prerequisite to any transaction involving sale, lease, or other significant commitment of funds for the Subject Property.

F. Testimony and Completion of Contract Appraisal Services: The contract for appraisal, consultation or analytical services are fulfilled and the total fee payable upon completion of the report. The appraiser, or those assisting in preparation of the report will not be asked or required to give testimony in court or hearing because of having made the appraisal, in full or part, nor engage in post appraisal consultation with client or third parties except under separate and special arrangement and at additional fee. If testimony or deposition is required because of subpoena, the client shall be responsible for any additional time, fees, and charges regardless of issuing party.

G. Exhibits: The sketches and maps in this report are included to assist the reader in visualizing the property and are not necessarily to scale. Various photos, if included, are included for the same purpose as of the date of the photos. Site plans are not surveys unless shown from a separate surveyor.

H. Legal, Engineering, Financial, Structural, Mechanical, Hidden Components, Soil: No responsibility is assumed for matters legal in character or nature, nor matters of survey, architectural, structural, mechanical, or engineering nature. No opinion is rendered as to the title which is presumed to be good and merchantable. The property is appraised as if free and clear, unless otherwise stated in particular parts of the report.

The legal description is assumed to be correct as used in this report as furnished by the State of Alaska.

Please note that no advice is given regarding mechanical equipment or structural integrity or adequacy, nor soils and potential for settlement and drainage (seek assistance from qualified architect and/or engineer); nor matters concerning liens, title status, legal marketability (seek legal assistance). If this appraisal is performed for financing purposes, the lender and owner should inspect the property before disbursement of any funds; further it is likely the lender or owner may wish to require mechanical or structural inspections by a qualified licensed contractor, civil or structural engineer, architect, or other expert.

The appraiser has inspected as far as possible by observation, the land and timber; however, it is not practical or possible to personally observe the whole of the Subject Property or conditions beneath the soil. The value estimate considers there being no such unobservable conditions that would cause loss in value. The timber subject to this appraisal appears healthy and sound, however outbreaks of forest pests and disease in the area could occur. The appraiser does not warrant against condition or occurrence of problems arising from environmental conditions.

The appraisal is based on there being no hidden, unapparent, or apparent conditions of the property site, subsoil, or structures or toxic materials which would render it more or less valuable. No responsibility is assumed for any such conditions or for any expertise or engineering to discover them.

I. Legality of Use: The appraisal is based on the premise that there is full compliance with all applicable federal, state and local environment regulations and laws unless otherwise stated in the report; that all applicable zoning, building, and use regulations and restrictions of all types have been complied with unless otherwise stated in the report. Further, it is assumed that all required licenses, consents, permits or other legislative or administrative authority by local, state, federal and/or private entity or organizations have been or can be obtained or renewed for any use considered in the value estimate.

J. Inclusions: Equipment or personal property or business operations except as specifically indicated and typically considered as a part of real estate, have been disregarded with only the real estate (i.e. the standing timber) being considered in the value estimate unless otherwise stated.

K. Proposed Improvements, Conditioned Values: Improvements proposed, if any, on or off-site, as well as any repairs required are considered, for purposes of this appraisal, to be completed in good and workmanlike manner according to information submitted and/or considered by the appraisers. This estimate of market value is as the date shown, as proposed, as if a transaction were completed and a timber harvest program was operating at levels shown and projected.

L. Value Change & Alteration of Estimate by Appraiser: The estimated market value, which is defined in the report, is subject to change with market movement over time; value is highly related to exposure, time, promotional effort, log markets, motivation, and conditions surrounding the offering. The value estimate considered the productivity and related attractiveness of the property physically and economically in the market place as it contributes to an economic or social need.

In cases of appraisals involving capitalization of income benefits, the estimate of market value is a reflection of such benefits and the appraisers interpretation of income, yields, and other factors derived from general or specific client and market information. Such estimates are reported as of a specific date; they are thus subject to change since the market and value are naturally dynamic.

M. Management of the Property: It is assumed that the property which is the subject of this report will be under prudent and competent ownership and management; neither inefficient nor superefficient.

N. Changes and Modifications: This appraisal report and value estimates are subject to change if physical, legal entity, market conditions, or financing different than envisioned at the time of writing this report becomes apparent at a later date. The appraiser reserves the right to alter statements, analysis, conclusion or any value of estimate in the appraisal if there becomes known to the undersigned facts pertinent to the appraisal process which were unknown to the appraiser at the time of report preparation.

O. Timber Inventory. The timber type acreage and timber inventory information presented in this appraisal is assumed to be accurate. Although there may be instances of inaccurate volume and species composition estimates portrayed in individual timber types of the inventory, the whole of the timber inventory is deemed to be reliable, however, *THE TIMBER INVENTORY IS AN ESTIMATE* and the appraiser assumes no liability for the true accuracy of the timber inventory.

P. Threatened, Endangered and Sensitive Species. The effects of measures taken to protect the bald eagle and anadromous or high-value resident fish has been estimated to be the withdrawal from timber production of approximately 240 acres. Nevertheless, the appraiser assumes no responsibility for differences in this estimate and actual management requirements enforced by any state or federal agency.

Q. Export Restrictions. All timber values are appraised as being fully private without export restrictions. It is the judgement of the appraiser that export restrictions affecting the Subject Timber will not be implemented by any state or federal agency. The potential for the application of export restrictions to the Subject Timber was not considered in this appraisal.

R. Acceptance of and/or use of this appraisal report by the client or any third party constitutes acceptance of the above conditions.

II. OBJECTIVE OF THE APPRAISAL

A. Purpose. The purpose of this appraisal is to estimate the market value of the timber resources of the Kodiak Island Borough's ownership on Shuyak Island as of September 1, 1994.

B. Function. This report has been requested by Mr. Richard M. Goossens, Regional Appraiser, Alaska Region, USDA Forest Service, (through Mr. David Lau, Lau and Associates, Inc.) in order to provide a third party estimate of timber value to be reported to the Exxon Valdez Oil Spill Trustee Council.

C. Definition of Market Value. The most probable price which a property should 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:

1. The buyer and seller are typically motivated;
2. Buyer and seller are well informed or well advised, and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars, or in terms of financial arrangement comparable thereto; and
5. 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.¹

In addition to this definition, market value for the sale of timber only, includes all rights necessary to harvest the timber such as the rights to work on the property during a normal operating season, rights to construct roads, landings, log transfer facilities, camps, moorage, and other improvements, the right of ingress and egress for harvest purposes, and other related rights.

¹ *Federal Register*, vol. 55, no. 163, August 22, 1990, pages 34228 and 34229. This is the definition generally used in conjunction with transactions subject to the Financial Institutions Reform, Recovery and Enforcement Act of 1989.

D. Property Rights Appraised. The property rights appraised in this report are those timber harvest rights and interests held by the property owner in fee simple title.

E. Present Ownership of the Subject Property. The property on which the Subject Timber is located is currently owned by the Kodiak Island Borough (KIB). Previously the property was owned by the U.S. Government. The State of Alaska's Municipal Entitlement program was the vehicle for the transfer of ownership to KIB. A selection process and legal agreement between the State and KIB culminated on June 19, 1981 with most of the Property identified in this process. The last pieces of the current KIB ownership on Shuyak Island was put in place in 1985 with a land exchange between KIB and the State of Alaska.

F. Date of Value Estimate. The date of value estimate is September 1, 1994. Property inspections were performed during the months of July, August & September , 1994.

G. Legal Description. See Appendix A, Draft Title Report - Shuyak Island Acquisition. This list contains lands located in the State of Alaska, referenced from the Seward Meridian, containing approximately 26,624 acres, dated September 6, 1994, prepared by the State of Alaska.

IV. MARKET AND AREA ANALYSIS

The information presented in this section is designed to provide a framework for comparing the Subject Timber with properties of comparable characteristics, and for the analysis of the unit attributes of the Subject Timber with the market values of those units. With these facts in hand, assumptions necessary to the determination of market value can be made in light of overall expectations about the current and future timber market.

A. The Timber Market. The term "timber market" suggests a homogeneous group of buyers and sellers involved in the sale of a homogeneous product (i.e. land and timber or only standing timber). Depending on the subject timber, its location, and the individuals or firms involved, however, the specific "timber market" may vary greatly between regional norms and averages.

The market area that we are concerned with here is that of the Subject Timber. This area extends from Southeast Alaska, to the North generally no further than the northern reaches of Prince William Sound, and to the Southwest to Afognak and Kodiak Islands. From time to time there may be minor exceptions to this area delineation.

There are no sales of record that are comparable to the Subject Timber. All data reflects sales of considerably less volume, less acreage, sales containing export restrictions, and sales far removed geographically from the Subject.

By means of examples however, Table 1, below presents the results of two timber sales within the overall market area, that contain some elements similar to the Subject. For the general location of these sales see Exhibit 3.

TABLE 1
Market Area Timber Sales

Sale #	Sale Name	Sale Date	Volume in 1,000 board feet (MBF)		Volume (MBF)	Price/ MBF	Total Price
			Spruce	Hemlock			
1	Port Graham	12 - 1993	6,015	0	6,015	\$101	\$607,515
2	Kelsall Relay	5 - 1994	5,293	1,947	7,240	\$201	\$1,455,200

Most of the timber harvest activity on private lands has been conducted under management agreements, rather than timber sales. Management agreements are typically negotiated between the land/timber owner and the timber manager/purchaser. Various arrangements are made for profit and risk assignments between the owners and managers.

1. The Land & Timber Owners. There are several different types of timber sellers, all of which can have an effect on the market value of timber.

a. Alaska Native Corporations. In the market of the Subject this group of sellers makes up the vast majority of privately held timber resources. Sealaska, Klukwan and many others have been active in selling timber in Southeast Alaska for many years. In the Prince William Sound Eyak, Chugach Alaska, Chenega and Tatitlek all have significant timber resources but have generally been active only recently. On Afognak Island native corporations have been harvesting timber since the late 1970's. The Afognak Native Corporation, Ouzinkie Native Corporation, and the Natives of Kodiak have harvested considerable volume of timber. When timber is sold by Native Corporations it is generally on a freight at ship (FAS) basis. Traditional timber sales represents a very small percentage of the total harvest. (Timber sales are transactions of real property involving standing timber. The buyer of the timber sale is generally responsible for removing all designated timber and the costs associated with it. The value paid for timber sales is referred to as stumpage.)

All of the timber harvest activity conducted by Native Corporations in the Prince William Sound has been marketed on a FAS basis.

b. Other Private Landowners. Generally small woodland owners market directly to timber buyers. Native allotments and other privately held land that fit into this classification, comprise an insignificant amount of the regional timber resources.

Because of the high costs of operations and transportation, most small woodland operations are not commercially feasible. The major exceptions are when a small ownership is in the immediate area of an ongoing operation or where a small ownership is in close proximity to a processing or shipping facility.

c. Federal, State and Local Government. The timber supply of the U.S. Forest Service, makes up the largest single source of timber. The Chugach National Forest, which encompasses the Prince William Sound, has no plans to harvest timber other than extremely small volumes of predominately salvage material. The current land base of this Forest does include lands comparable to the Subject, but current management direction generally precludes intensive timber harvest.

The Alaska Department of Natural Resources, Division of Forestry controls

significant acreage of timber resources, as does the University of Alaska, but these agencies are not a major factor in the supply of forest products. Several boroughs own and manage significant areas of commercial timberlands, but are generally not a significant factor in influencing the timber market. Most government timber, other than borough, is sold through a process of timber sales or long term contracts..

2. Timber Buyers. There are two types of buyers, direct and indirect. Direct buyers are those firms involved in the manufacture of lumber and fiber products, and/or those that sell directly to foreign timber purchasers. In Alaska and the Pacific Northwest direct buyers are the primary purchasers of timber and timber sales. As of the effective date of this analysis, the largest direct timber purchasers include Alaska Pulp, Ketchikan Pulp, Klukwan, Metlakatla, Rayonier International, Sealaska, Wasser & Winters, and others. Direct buyers are often referred to as users.

The vast majority of timber harvested from private lands in Alaska is intended to be sold in the export market. Nearly all of the direct purchasers in Alaska market logs to primarily Pacific Rim Countries, such as Japan, China, Korea, and Taiwan. Generally this marketing is done on a purchase order basis, with short time frames for delivery. This market is volatile and in its mechanisms similar to most commodity markets.

Indirect buyers are those that purchase timber with the intention of reselling the timber to one or more of the direct users of timber. These buyers include loggers, timber brokers, and other individuals that may purchase standing timber for speculative investment or immediate harvest. These indirect buyers are generally not able to compete in the open market with direct buyers, and would not be considered as potential purchasers of the Subject Timber.

3. Characteristics that Influence Value. The price paid for timber is ultimately determined by the intended use of the final product and the total effort required to obtain, manufacture, and deliver that product. The most important elements in this equation are the supply of timber, the demand for timber and the ultimate product, the physical characteristics of the subject timber, the political constraints to harvesting and processing timber, and the location of the subject timber relative to the users of timber.

a. Supply of Timber. Given a particular level of demand for timber, for domestic processing and export, fluctuations in the availability in supply will affect the price that an informed buyer is willing to pay. In addition to the

physical presence of timber in any area, there may also be seasonal fluctuations in availability of timber for harvest. In the winter, snow and heavy rain may bring harvesting to a halt, or may require additional expenditures for road construction and maintenance.

The relative proportion of mature timber in the general area has been steadily decreasing, although the standing volume on private lands in the market area of the Subject is roughly 4 billion board feet.

Since 1989, when timber harvest operations in the Prince William Sound began on a large scale, the volume of logs supplied from the Market Area of the Subject has varied from 75 million board feet to 150 million board feet per year. In the immediate area of the Subject, (i.e. Afognak Island) average annual production of logs has been in the order of 80 million board feet per year. These production figures make up a small percentage of the total production of western hemlock and Sitka spruce in the Pacific Northwest.

The total volume of logs exported from the Anchorage Customs District Since 1989 through 1993 has varied from 643 to 528 million board feet per year. The total volume of western hemlock and Sitka Spruce exported from the United States during this period ranged from a low of 1,144 million board feet in 1989 to a high of 1,817 million board feet in 1993.

Increasingly, log supply is a world wide issue. Logs from New Zealand, Chile, Australia, and others have made some advances in the market areas of pulp wood and low grade logs. These countries do not, however, supply a significant volume of high quality logs.

In other areas of the world where higher quality logs are found, the supply of harvestable material is generally highly constricted. The political decisions in the United States have nearly eliminated public wood supplies from the export market. British Columbia has recently changed management emphasis affecting enormous areas of commercial forestland that have resulted in reduced harvest projections for the immediate period, and appears to be entering a trend of implementing further harvest restrictions.

The Russian Far East contains a vast supply of old growth timber, however, it generally yields very small logs. Furthermore, there are significant problems to be overcome before production in the Russian Far East can be a major factor in the world market. The two most important factors are the lack of infrastructure, and the dubious political and business environment. In 1993 Russian Far East timber supplied approximately four percent of Japan's wood consumption. While it is expected that there will be nominal growth in the

volume shipped from the Russian Far East, many experts believe that it will be ten to fifteen years before log exports from this area can have a serious effect on market structure.

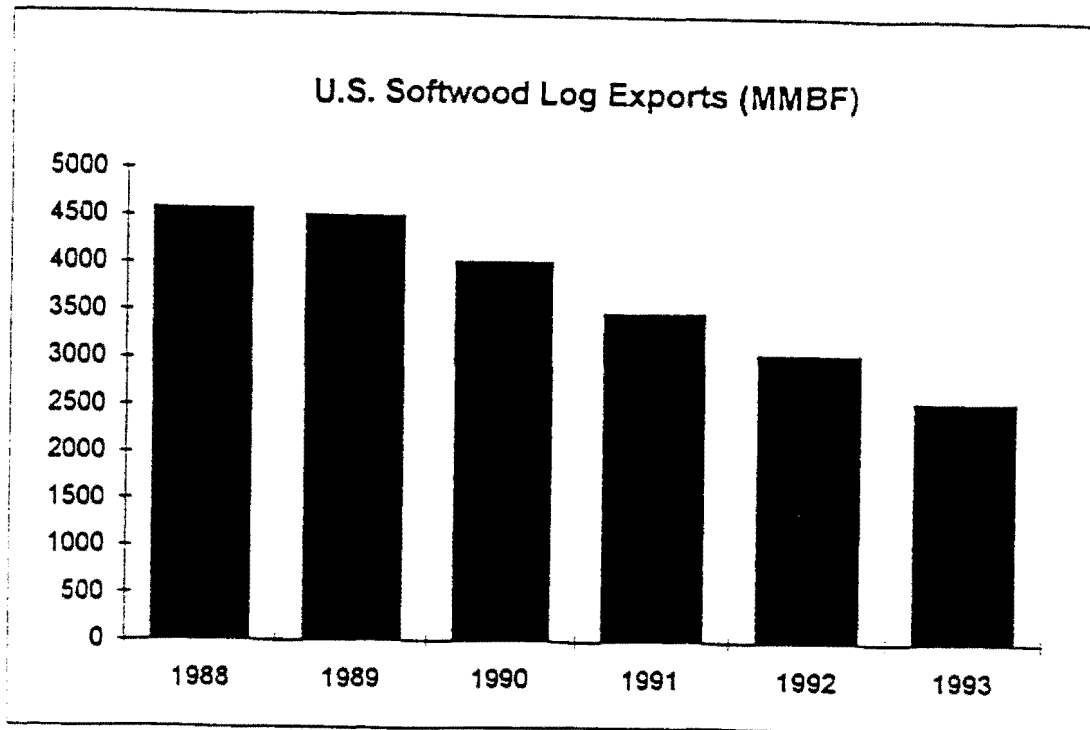
b. Demand for Timber and Wood Products. The regional demand for timber, and the number of timber users actively purchasing timber will also affect the price an informed buyer is willing to pay. Because of the large distance from the Subject to timber processors and export operations, this region generally has a soft demand for low quality timber, which is more readily available from closer sources.

The primary advantage that the Subject timber market has over other markets is its predominance in old growth timber. High quality logs are still very much in demand on the export market, and it is expected that a premium will be paid for these logs for many years to come.

Currently, the overall demand for timber products during the short run is expected to remain fairly stable. Earlier in this year demand projections foresaw a moderate increase for the remainder of 1994. A five year high in US Housing starts and an expectation of revitalized European and Japanese economies were the major factors driving these projections. So far this moderate increase has not been seen. In fact, current log prices and projections for the fourth quarter of 1994 are expected to be lower than those at the beginning of 1994. Nevertheless, the demand during the next five years is expected to be moderately increasing, with greater gain in the high quality log sector.

Exhibit 4, below, demonstrates the major factor for this optimistic view. Through 1993 the general trend in the price level of export logs was up; nevertheless, the supply of logs was unable to adjust to take full advantage. In fact, as seen in the graph below, the total volume of log exports decreased.

EXHIBIT 4 - Log exports from California, Oregon, Washington & Alaska



Source: Random Lengths 1993 Yearbook, Volume XXXIX. Random Lengths Publications, Inc., Eugene, Oregon 1993.

c. Physical Characteristics of Subject Timber. Timber quality is one of the most important factors that influence value since it is an indication of the types of wood products that can be processed from timber. There are two general categories of timber quality measures, "Bureau" and U.S. Forest Service grades, and special use grades. Bureau grades are those standardized by an independent log grading and scaling organization, which in Alaska and the Western portion of the Pacific Northwest is the Northwest Log Rules Advisory Group that has six independent grading bureaus as members. U.S. Forest Service grades are very similar in specifications to Bureau grades.

Special use grades are those that refer to a special product, such as export sorts, posts and pilings, and other differentiation within standardized grades. These special use grades may be implemented by special arrangements with a log scaling bureau or they may be limited to use by a specific buyer or seller. In the market pertinent to the Subject, log sorts are the primary measure of log value. In the highest export sorts, the measure of log value is a

combination of log sort and log grade. For example, in a high line Japanese sort of Sitka Spruce the price for a #1 Sawlog would be in the order of \$3,300 per thousand board feet (MBF), while the same sort could contain a special mill Sitka spruce log that may sell for \$2,100/MBF.

In addition to timber quality grades, physical characteristics such as the ratio of net volume to gross volume, average log diameter and piece size, the straightness of the timber, and many others will affect the price that an informed buyer is willing to pay.

Another important consideration is the distribution of timber on the ground, and the accessibility of the timber. Both of these factors relate directly to harvest costs. A dense stand with a high timber volume per acre will have a substantially lower logging cost per unit of volume than a stand of scattered timber, even of the same timber quality. Likewise, stands of the same quality and volume per acre may differ in value depending upon the difficulty of road construction, logging requirements, permitting processes, etc.

d. Political and Legal Constraints to Harvesting Timber. In general the formal political constraints enforced by government focus on the protection of the physical environment for the good of the public in the long term. In areas where there is potential for mass soil movement, near protected plant or animal species, areas of significant scenic value, and near significant bodies of water, harvest may be limited or even prohibited altogether.

Of particular concern to this analysis is the federal Threatened and Endangered Species Act (TES), and the Forest Resources and Practices Act of the State of Alaska. While the Forest Resources and Practices Act generally provides specific regulations for forest management activities, the TES only provides policy and programmatic direction. The protection of the bald eagles, and to a lesser extent other Potential, Endangered, Threatened, or Sensitive (PETS) species involves several federal and state agencies that have produced a series of various regulations that directly address forest management issues. Because the practical application of TES is still being developed, the affected agencies' regulations are various and often contradictory.

The effects of protecting bald eagle nesting sites result in the reduction of harvestable area and the potential relocation of roads and other harvest related improvements. In this analysis it is assumed that a 5.2 acre no harvest area for each eagle nest will adequately address the concerns of the U.S. Fish and Wildlife Service. This figure is reached by using the 330 foot radius around each eagle nest, and assuming that most of these nests are near bodies of water

or other open areas, allocating two-thirds of this total area to the timber type in which it is located.

One of the greatest effects of the Forest Resources and Practices Act is the requirement for essentially no harvest buffer zones along anadromous and other high value fish water bodies. Each such water body must be protected by a 66 foot buffer. Although there are provisions in the Forest Resources and Practices Act for the removal of trees within the buffers, in practice such variations are getting more and more difficult to obtain. The net effect then is that in this analysis all timber within the buffers is removed from the operable timber base.

Generally, civil suits attempting to prohibit timber harvest operations on private lands have been ineffectual. The Subject timber is, however, located in an area that has not been subject to timber harvest. Because of the lands' "wilderness nature" it is reasonable to assume that a significant public outcry could involve legal challenges during the permitting process.

Informal political constraints include pressure from "environmental" organizations and the general public that may influence the harvest operations of a particular landowner based upon his goals of landownership. A public corporation, for instance, may find it expedient to leave visual buffers of standing timber, or to create recreation sites on commercial forestland in order to bolster its public image.

e. Relative Location of Subject Timber to Users. Regardless of any of the above factors, if the subject timber is isolated from users, the timber may have greatly diminished value because of the high costs of development of log transfer facilities, logging camps, and transportation systems. In contrast, if the subject timber is located in the center of a highly competitive timber market, the purchase price may be well above regional norms.

4. Log Market. The log market refers to buying and selling of logs delivered on a freight at ship (FAS) basis, to users or exporters. The prices reflect not only the value of the wood product (i.e. lumber, export logs, paper, poles, etc.) but also the cost of all items involved in timber management, harvest, and transportation of logs, including taxes and profit and risk.

At the end of the Spring of 1993 the timber market applicable to the Subject Property had reached an all-time nominal peak in price level, and the highest real price level peak since 1981. This produced a short term (approximately 6 months)

oversupply of timber. This imbalance in turn led to purchasers being able to slide into a downward price adjusting trend.

Since that time the timber and log markets fell twenty to thirty percent in value (depending on the specific product). During the fourth quarter of 1993, prices began to increase and continued through the first quarter of 1994. Since that time prices have fallen and have subsequently stabilized, with price fluctuations more directly related to seasonal fluctuations in inventory and production. The overall, long term trend is expected to show moderate price increases, especially in Japanese quality logs and pulp wood.

Table 2, below, presents a composite of current FAS delivered log prices as quoted by mills and exporters for the Afognak Island area, as of the effective date of September 1, 1994. The purchasers surveyed in the development of this price table include Emachu USA, Rayonier International, Sumitomo Forestry Inc., Citifor, Ketchikan Pulp Company, CanFor, and Nichimen America Inc.

TABLE 2
FAS Log Prices
(Per thousand board feet, Scribner Rule)

Sort	Sitka Spruce
1	\$150
2	\$800
4	\$700
5	\$600
6	\$650
7	\$500

For an explanation of the sort codes and their specifications, see the accompanying *SHUYAK ISLAND TIMBER INVENTORY* report.

V. DESCRIPTION OF THE SUBJECT TIMBER

The Subject Timber is spread over 26,624 acres of Shuyak Island.

A. Forest Resource. Approximately 21,600 acres of this tract is occupied with 290 timber types. In general terms the timberland consists of medium to well stocked old growth conifer types. The overall composition of these timber types is one hundred percent Sitka spruce.

The Subject Timber was inventoried by Pacific Forest Consultants, Inc. during the months of July and August, 1994. The purpose of this inventory was to estimate the merchantable timber volume and to determine site specific information regarding logging systems on the Subject Property. During the inventory every timber type was treated as if it was economically feasible to harvest, in full or in part. This complete inventory provided the starting point for the evaluation of the forest resources of the Subject Property.

In performance of the timber inventory, Pacific Forest Consultants, Inc. conducted quality control measures to ensure that the estimate timber volumes (in total and by export sort) were reasonably accurate.

The initial timber type acreage was reduced, after the field work was completed, to reflect the need to protect bald eagle nests, and the riparian areas of anadromous fish habitat, resulting in a net 21,360 acres of merchantable timber types. Table 3, below presents a summary of the timber inventory.

TABLE 3
Timber Inventory Summary

Acres	21,360	Total Gross Volume	431,967 MBF
Number of Plots	1,211	Total Adj. Net Volume	397,605 MBF
Average DBH	16.8 inches	1 Sort Volume	106,458 MBF
Ave. Merchantable Height	48 feet	2 Sort Volume	25,540 MBF
Basal Area/Acre	232 square feet	4 Sort Volume	57,205 MBF
Stems/Acre	202	5 Sort Volume	63,309 MBF
Gross Volume/Acre	20.2 MBF	6 Sort Volume	20,565 MBF
Adjusted Net Volume/Acre	18.6 MBF	7 Sort Volume	124,528 MBF

DBH = diameter at breast height (4.5 feet above high ground); MBF = thousand board feet, Scribner scale; Adjusted Net Volume refers to net volume plus sound utility volume.

See the accompanying timber inventory report for the location of the timber types of the Subject Property, and detailed timber inventory information. The *TIMBER INVENTORY - SHUYAK ISLAND* report presents the inventory specifications, description of the export sorts, timber type map, type summary by sort, statistical results of the net volume per acre estimates, log piece size summary by sort, and the inventory reports of the individual timber types.

B. Topography and Logging Systems. The lands of the KIB ownership on Shuyak Island are composed of a mixture of flats and moderate slopes. There are literally hundreds of lakes and ponds, and several hundred rocky hillocks. This varied, although essentially flat terrain, is among the most suitable ground for cost effective logging systems in the region. It is assumed that all of the timber types are suitable for ground based yarding such as tractor and shovel yarding. This assumption is based upon the experiences of logging contractors on Afognak Island

The designation of timber types as helicopter logging units is dependent upon road locations. There are no physical constraints to providing road access to all areas of the Subject Property. There are, however, economic considerations that would have to be addressed before a transportation plan designed to provide full access could be developed. In other words there are some timber types that are physically removed from probable road locations. This situation could warrant the use of helicopter logging in order to maximize the net return to the timber owner.

The total inventoried area of 21,600 acres was reduced by 240 acres, or 1.1 percent, in order to comply with the Forest Practices Act and U.S. Fish & Wildlife Service recommendations for the protection of anadromous fish habitat and bald eagle nest. The resulting 21,360 acre timbered area (which is approximately 80 percent of the total ownership area of 26,624 acres) forms the starting point for logging system analysis.

C. Transportation Systems. All of the Subject Property is currently unroaded. There are no log transfer facilities (LTFs) or other improvements that would be required to harvest the Subject Timber located on the property.

Road construction costs are very high for remote areas such as the location of the Subject Timber (\$100,000 to \$180,000 per mile) yet typical for the region. The primary reason for this is the cost of transportation for equipment, materials and supplies. The type of road construction required to harvest the Subject Timber would be somewhat easier to accomplish than the typical roading situation in Southcentral Alaska because of the relatively easy slopes and the existing rock sources on the Subject Property. The cost to accomplish construction would probably be slightly greater than the mean because of the lack of infrastructure on the

Subject Property and its isolated location.

A complete transportation system that could access nearly all timbered types of the Subject Property would consist of approximately 170 miles of new road construction. This road system is of fairly high density (4 miles per square mile) because of the excessive number of lakes and ponds that would have to be skirted, and because of the nature of shovel logging where long yarding distances are inefficient.

VII. THE PRICE - VALUATION PROCESS

In order to reach an opinion of fair market value, this appraisal process considers the objectives of the typical buyers and sellers that would be involved in the disposition of the type of property represented by the Subject. These players will generally use one or more of the following accepted methods of estimating value; the cost approach, the income approach, or the sales approach. Each approach may address a special concern for a particular buyer or seller and may indicate a wide range of values.

In this section of the appraisal, the Subject Timber is assessed using all applicable approaches. The appropriateness of the application of the three approaches to valuation is considered in the Reconciliation of Approaches. The final estimate of value is arrived at by balancing the strong and weak points of the specific application of each of the three approaches.

A. Sales Comparison Approach. This approach relies upon open market sales of timber as the basis for appraising the Subject Timber. Each sale of forestland is compared to the Subject Property. The particular components of the timberland property and their associated values form the basis of its comparison to the Subject Property.

The focus then is on sales of timberland properties of similar characteristics to the Subject Property. Such sales are referred to as comparable sales, noting that there will always be differences in acreage, location, timber characteristics, and improvements. Adjustments to the comparable sales are limited to those differences that would be seen as significant to the types of buyers in the specific timberland market. The purpose of the adjustment procedure is to render the comparable sales interchangeable with the Subject Property in the market place.

The land sales listed in Table 1, on page 11, above, form the pool of best available information. These sales, however, are not comparable and could not be meaningfully adjusted to be comparable to the Subject Timber. The primary reason for this is in the size of the timber sales. The Subject Timber volume is in the order of forty times greater than that of the two sales listed. Furthermore there is no regional market evidence that could provide a basis for a size - price adjustment.

The sales comparison approach is not used in this analysis.

B. Income Approach. Nearly all buyers and sellers use some form of the income approach when deciding on the price for investment or income property. This approach predicts the net returns from operating the property under one or more management scenarios. The flow of revenue and costs may vary greatly from one property to another

depending upon the property's characteristics and the characteristics of the market for the property's products.

The market for the Subject Timber is generally limited to industrial timber operators and timber exporters. An estimate of value can be derived by assuming that the potential purchaser will manage the Subject Timber as a short to mid term (five to ten years) investment for timber production. The basic management scenario used in this analysis is to liquidate the merchantable timber as soon as practical, in order to gain the return to and return of capital as soon as possible.

1. Merchantable Timber Type Analysis. The *TIMBER INVENTORY - SHUYAK ISLAND* presents the total volumes for ALL timber types of the Subject Property, regardless of the economic potential of these timber types. The purpose of this analysis is to determine which types would contribute to the economic value of the Subject Timber, and which types would detract from the economic value.

The results of this analysis will provide a cost effective timber harvest plan where each individual timber type contributes to the total net value of the Subject.

For the purposes of this analysis economic value is defined as a positive cash flow when comparing the total gross value (FAS price multiplied by total adjusted net harvest volume) of each timber type with the total cost that would be incurred to bring the timber to a ship, including profit and risk.

a. First Screening. All timber types that contain 50 percent or more of the total adjusted net volume in domestic and pulp material (1 Sort) are eliminated from the timber harvest inventory. This first screening is intended to remove those types that have a preponderance of small trees, low volume per acre and ultimately low value, from the timber harvest plan.

Appendix B - Type Feasibility Analysis; Results of First Screening presents two sets of spreadsheets. The first set shows the types that were eliminated from the harvest plan, and the second set shows the types that are remaining.

Upon completion of this first screening, projected harvest adjusted net volume is estimated at 297,602 MBF, or 25.2 percent less than the total adjusted net inventory volume. The harvest area remaining after this screening is 17,878 acres, down 16.3 percent from the total net inventory area.

Justification: On average these types would have a gross revenue of \$277/MBF. Selective logging from these types would not be economically feasible because of excessive logging costs associated with

extremely small log volume and a relatively high log yarding time. Even if it would be appropriate to use an overall average logging cost (which would be in the neighborhood of \$350/MBF) to harvest these types, the timber owner would lose money.

Conclusion: For planning purposes it is reasonable to assume that a prudent buyer would exclude these types from a timber harvest plan. These types could, however, be selectively harvested if transportation systems had to be located in or adjacent to these types in order to access economically feasible types. Any harvesting would be limited to the removal of export quality material within a short yarding distance of 300 to 400 feet. The contributory value of this "roadside" timber would be recognized in the harvest plan and cash flow analysis that follows.

b. Second Screening. The results of the first screening form the basis of analysis for this second screening. Here all types that have a per acre gross value less than the overall per acre costs of production, including profit and risk, are analyzed as to their marginal cost to bring their projected harvest volume to FAS.

Individual type per acre gross value is calculated by dividing the gross value per acre of the projected harvest by the projected harvest volume per acre.

Projected harvest volume is defined as all export sort material plus an incidental amount of the pulp and domestic material. (This incidental amount is assumed to be twenty percent of the total domestic and pulp volume, figured on a individual timber type basis, which at this point is approximately 6 percent of the total harvest volume.) The domestic and pulp volume will be harvested and brought to the sort yard as incidental to road construction, logging system implementation and the extraction of the export material.

Total harvest area production cost (which at this point is calculated at the harvest and road construction levels necessary to harvest the volume resulting from the first screening), is divided by the total harvest area to yield an average harvest cost per acre.

Every type with a gross value per acre less than the average harvest cost is subjected to the following marginal analysis, wherein these assumptions are made:

i. All types can be efficiently harvested by tractor/shovel logging systems at a production rate of 5 acres per day. This production

figure is derived from actual production on neighboring Afognak Island.

ii. Marginal logging costs are determined by extrapolation (when necessary) from the elements of Table 4, below. The costing assumptions used to derive this table are the same as those indicated for Shovel Logging in Appendix E - Production Cost Appraisal Worksheets. Some of the general assumptions include; two full logging sides; shovel, grapple cat, and loader equipment configuration per side; and production times of nine hours per day, six days per week, and 170 days per year. Note that extrapolation was only performed when total marginal costs per acre were within ten percent of total gross value per acre.

TABLE 4
Shuyak Shovel Logging Matrix

Production Pieces/Day	Piece Size (board feet)								
	50	75	100	125	150	175	200	250	300
400	\$1,155	\$783	\$596	\$485	\$410	\$357	\$317	\$261	\$224
450	\$1,031	\$700	\$534	\$435	\$369	\$321	\$286	\$236	\$203
500	\$932	\$634	\$485	\$395	\$335	\$293	\$261	\$216	\$186
550	\$850	\$579	\$444	\$363	\$308	\$270	\$241	\$200	\$173
600	\$783	\$534	\$410	\$335	\$286	\$250	\$224	\$186	\$162
650	\$725	\$496	\$381	\$313	\$267	\$234	\$209	\$175	\$152
700	\$676	\$463	\$357	\$293	\$250	\$220	\$197	\$165	\$144
750	\$634	\$435	\$335	\$276	\$236	\$208	\$186	\$157	\$137
800	\$596	\$410	\$317	\$261	\$224	\$197	\$177	\$149	\$130
850	\$563	\$388	\$300	\$248	\$213	\$188	\$169	\$143	\$125
900	\$534	\$369	\$286	\$236	\$203	\$179	\$162	\$137	\$120
950	\$508	\$351	\$273	\$226	\$194	\$172	\$155	\$131	\$116
1000	\$485	\$335	\$261	\$216	\$186	\$165	\$149	\$127	\$112
1050	\$463	\$321	\$250	\$208	\$179	\$159	\$144	\$122	\$108
1100	\$444	\$308	\$241	\$200	\$173	\$153	\$139	\$119	\$105
1150	\$426	\$297	\$232	\$193	\$167	\$148	\$135	\$115	\$102
1200	\$410	\$286	\$224	\$186	\$162	\$144	\$130	\$112	\$99

iii. The average harvest cost per acre is \$6,619. This cost was developed by using the timber volume and acreage at the end of the first screening. (See *Shuyak Production Costs - Average Costs for Second Screening* in Appendix C.)

iv. Fixed costs associated with LTF and road construction for the timber types remaining after the first screening are not included in this marginal analysis. Total marginal costs, therefore, include the individual logging cost plus the following:

TABLE 5
Additional Marginal Production Costs

Cost Item	Cost/MBF
Reman., Sort, Dump & Tow	\$50
Camp/Personnel	\$25
Marketing	\$6
Administration	\$5
Profit & Risk	\$45
Total Additional Costs	\$131

v. Pieces/day equals pieces/acre of projected harvest volume multiplied by the shovel logging system daily acreage (i.e. 5 acres).

vi. Individual type production costs per acre equals total type projected harvest volume multiplied by total marginal production costs per MBF, and then divided by type acreage.

The results of this analysis are detailed in Appendix C - Type Feasibility Analysis, Second Screening Spreadsheets. Overall, this screening reduces projected harvest adjusted net volume to 241,047 MBF, or 19.0 percent less than the projected harvest volume remaining after the first screening. The change in acreage is, as would be expected, far greater than the volume change. The harvest area remaining after this screening is 10,948 acres, down 38.8 percent from the harvest area remaining after the first screening.

Justification: Types that require the expenditure of costs in excess of revenue will reduce the total value of the timber resources. While this scenario does affect the fixed costs of road construction, log transfer facility construction, mobilization, administration and marketing, there is more than sufficient harvest volume remaining after this screening to efficiently distribute these costs.

Conclusions: As in the first screening the portions of the types that were eliminated by this procedure would be selectively harvested when roads are in favorable locations to allow short yarding distances. This adaptation of the harvest plan thereby reduces the marginal cost of recovering volume from these types so that a net value can be obtained from each type.

c. Final Screening. This last look at type feasibility addresses the costs of development of marginal transportation systems in terms of the geographic dispersion of the remaining timber types, and the site specific characteristics of each type.

The vast majority of timber types that make up the pool of apparent economically viable timber types are clustered in the western half of the Subject Property. For this screening it is assumed that the transportation costs for all of these types is cost effective. This area of certain economic viability is referred to as the core area.

The rest of the types, those located in the eastern portion of the Subject Property, are assessed by a marginal cost analysis that includes the cost of road construction from the core area to the types in question. Since most of the transportation routes that access one of these marginal types accesses other marginal types further up the road, this marginal analysis is performed individually and cumulatively. In other words, type A, which comes first on the road may fail individually when the full road construction cost is charged against it. But when type B, beyond type A, adequately covers the road construction costs from the last road location through type A, type A becomes economically feasible since it must now only cover the cost of roads and spurs that leave the road that accesses type B..

In determining these marginal costs, logging costs were determined on a type basis utilizing the same information that is presented in the Second Screening, above. Every stand outside the core area was evaluated by comparing the total of the marginal logging costs and the marginal road construction costs, with the type's total gross value. The marginal road construction cost, at this point in the analysis is \$120,000 per mile.

The first type up the road system was analyzed first. If it paid for the road construction from the core area, and the road construction within the type required to log it, then it was included in the final harvest plan. If the total marginal costs exceeded the type's gross revenue the type was temporarily eliminated. When a type further up the road system was found to be economically feasible (by covering the road costs from the core area, or last economically feasible type), the temporarily eliminated type was re-examined to see if it would be economically feasible. The total marginal cost for re-examined types equals the marginal production costs plus the cost of roads and spurs that leave the paid road system. Those re-examined types with a positive net value are then included in the final harvest plan.

All of the types that failed this screening to this point were then

considered for helicopter logging. Because of small piece size and the fact that these types would be selectively harvested, an economically efficient helicopter yarding limit was estimated to be two thousand feet. Every type remaining that had some portion within two thousand feet of a planned road or navigable water was selected for helicopter logging. The logging system designation for these stands is shown as either heli-road or heli-water as the case may be.

Another step in developing the harvest plan was to add back to the list of stands selected for harvesting, the area along planned road construction of types that were previously designated as economically infeasible to harvest. It is assumed that a ten chain swath (five chains on each side of the road) would be selectively shovel harvested. It was further assumed that the cost to harvest these areas would be comparable to the overall logging cost. These types have a "Selective" logging system designation.

The final step in completing the harvest plan was to review every type individually for site specific characteristics that may have caused an economically feasible type to be erroneously excluded, or an economically infeasible type to be erroneously included. The intent of this step was to emulate the procedures that would occur when the harvest plan would be implemented by identifying whole stands and portions of stands that would detract from the total value of the Subject Property. The key factors that were considered in this analysis were piece size, stems per acre, volume per acre, and type structure.

Utilizing the inventory data and aerial photography, stands that passed previous screenings, or were added back into the harvest list because a road ran through it, were examined one by one. The stands that had a large number of stems per acre (greater than 250) generally had a vast majority of the volume in domestic and Korean sorts. The assumption used in the second screening was that a logger would be able to harvest stands efficiently by leaving up to 80 percent of the domestic volume in the woods, either as standing trees or tops. The stands that were eliminated in this final step were those where the majority of the trees were composed of domestic logs, clearly indicating that the assumption addressing the handling of domestic material was invalid in this situation.

Recognizing the limits of inventory data that averages timber type values, many types were partially retained in the harvest plan that, on average, appeared to be economically infeasible. In this case the aerial photography was scrutinized to isolate portions of types that included the best attributes of these types. If these types were added back into the harvest plan because of road locations, care was used to make sure that the portions included were within ten

chains of the road.

The results of this final step show a final harvest plan with an estimated harvest adjusted net volume of 216,309 MBF over 9,680 acres. Table 6, below, compares the final harvest parameters to the inventory and the results of the first two screenings. See Appendix D - Type Feasibility Analysis; Final Harvest Plan for the marginal analysis worksheet and the listing of types included in the final harvest plan.

TABLE 6
Final Harvest Plan compared to Inventory and Screening Results

Parameters	Inventory	First Screen	Second Screen	Final Harvest Plan
Adj. Net Volume	397,605 MBF	297,602 MBF	241,047 MBF	216,309 MBF
Area Covered	21,360 Acres	17,878 Acres	10,948 Acres	9,680 Acres
Road Construction	None	171 Miles	132 Miles	106 Miles

2. Harvest Plan & Cash Flow Analysis. This analysis essentially clearcuts timber types that fall within the conventional logging system area, and selectively harvests those types that are located adjacent to roads or that can be efficiently harvested using helicopters.

The following assumptions are used in this analysis:

- a. The annual discount rate used for this investment period is 9 percent. This rate is a real rate (independent of inflation), based upon a survey of financial institution that lend large sums for timberland investments of the magnitude indicated by the Subject Property.
- b. The costs of production as included in the tables below will remain constant during the investment period (i.e. these items will not increase in nominal value faster than the rate of inflation).
- c. The level of profit and risk assigned to this investment is 20%.
- d. Harvest restrictions will remain constant during the investment period.
- e. Log export regulations will remain constant during the investment period.

f. The discounting of revenues and expenses is calculated from the end of the month.

g.. The construction of a log transfer facility (LTF) would occur on the East shore of Shuyak Harbor. The logging camp would also be constructed at this site. The LTF/logging camp is appraised at fifteen acres. It is assumed that this area would be sufficient for land storage of up to 6 MMBF.

h The logging contractor will carry the costs of road construction and support services as a portion of its overall logging cost. Most of the costs of LTF development will be paid by the land owner to the logging contractor in the year of completion. Since the cost of the LTF development are included in the LTF, Sort, Dump & Tow cost item, the logging costs for the first two years of harvest operation would be reduced to reflect these advance payments.

i. Shuyak Type Feasibility - Final Harvest Plan, located in Appendix D, shows the sum of the total adjusted net volume that would be harvested by timber type. Note that the reason that the volume harvested in every type is less than the total cruised volume (as in the inventory report) is that approximately eighty percent of the domestic and pulp material would be left in the woods. In most circumstances there would be considerable numbers of standing trees left after logging. These trees are not assigned a value in this analysis because of the excessive period of time that would pass before any subsequent harvesting would be undertaken.

Since trees are most often not made up of only one type of log sort, some of the low value material would be inadvertently yarded to the landings. It is estimated that less than five percent of the total harvest volume would be of low value material, i.e. domestic and pulp logs.

j. FAS log payments are considered received at the time of loading.

k. The following total costs and cost per unit of production as shown in Table 7, below, are used in this analysis. All of these costs are presented in Appendix E in detail. (Note that the costs immediately following are not intended to be the same as those used in the Second Screening. The Second Screening costs, summarized in Appendix C, were used solely to develop a baseline for the marginal analysis exercise and were based upon the harvest volume remaining after the first screening. The costs summarized in Table 7, are based upon the final harvest volume subject to this appraisal.)

TABLE 7
Costs of Production

Cost Item	Harvest Volume (MBF)	Cost/MBF	Total Cost
Right of Way Logging	6,900	\$117	\$807,300
Helicopter Logging	2,832	\$309	\$874,437
Shovel Logging	206,577	\$182	\$37,597,014
Total Logging	216,309	\$182	\$39,278,751
Road Construction	216,309	\$63	\$13,637,931
LTF, Sort, Dump & Tow	216,309	\$59	\$12,762,231
Camp Operations	216,309	\$25	\$5,407,725
Marketing	216,309	\$8	\$1,700,000
Administration	216,309	\$7	\$1,460,000
Total FAS Cost	216,309	\$343	\$74,246,638

The initial weighted average FAS price of \$601/MBF and the weighted average logging costs of \$343/MBF are used throughout the following analysis. It is assumed that whatever price and cost appreciation that occur will be at levels comparable to the rate of inflation. Taking the FAS value and reducing it by the logging costs, the Kodiak Island Borough Severance Tax, and by the profit and risk margin of 20 percent yields the weighted net value. This net value is then multiplied by the projected harvest volume to yield total net value. Present net value is calculated by discounting the total net value to the effective date of this appraisal (i.e. September 1, 1994) at an annual rate of 9%.

The Table 8, below, summarizes the annual projected costs and revenues beginning in 1994 with the initiation of the permitting process through final timber harvests in the year 2006, utilizing the procedure outlined in the proceeding paragraph to determine total net value and present net value for the timber harvest and permitting activities for each year.

The basic rates of production for logging operations comparable to the Subject Property are 2,000 MBF per month for helicopter logging, and 4,000 MBF per month for conventional logging. In order to allow for equipment failure, unseasonable bad weather, and other factors that could delay production, the conventional logging production is reduced to a seasonal volume of 21,500 MBF.

Conventional production would begin during the summer of 1996, and Helicopter production would begin after road construction had reached the northeastern most portion of the conventional logging area. It is assumed that shipments would begin in August, 1996 and that each year's production would be shipped by the end of the operating season.

TABLE 8
Cash Flow and Present Net Value Discounted to September 1, 1994

1994 = Beginning year		FAS Price Appreciation = 0.0%					Discount Rate = 9%		
Year	Activity	Volume (MBF)	Dollars per Thousand Board Feet				Net	Total Net Value	Present Net Value
			FAS Price	Cost to FAS	Sever. Tax	Profit & Risk			
1994	Permitting	-	-	-	-	-	-	(\$100,000)	(\$100,000)
1995	Permitting	-	-	-	-	-	-	(\$100,000)	(\$91,743)
1996	Const. Costs	-	-	-	-	-	-	(\$338,400)	(\$284,825)
1996	Conv. Harvest	11,000	\$601	\$330	\$1	\$54	\$217	\$2,384,800	\$2,007,238
1996	Consumed Logs		400	MBF wasted in operations			(\$750)	(\$300,000)	(\$252,504)
1997	Conv. Harvest	21,500	\$601	\$330	\$1	\$54	\$217	\$4,661,200	\$3,599,302
1998	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$3,143,708
1998	Consumed Logs		400	MBF wasted in operations			(\$750)	(\$300,000)	(\$212,528)
1999	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$2,884,136
2000	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$2,645,996
2000	Consumed Logs		400	MBF wasted in operations			(\$750)	(\$300,000)	(\$178,880)
2001	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$2,427,519
2002	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$2,227,082
2002	Consumed Logs		400	MBF wasted in operations			(\$750)	(\$300,000)	(\$150,560)
2003	Conv. Harvest	21,500	\$601	\$343		\$52	\$206	\$4,437,600	\$2,043,194
2004	Conv. Harvest	21,500	\$601	\$343		\$52	\$206	\$4,437,600	\$1,874,490
2004	Consumed Logs		400	MBF wasted in operations			(\$750)	(\$300,000)	(\$126,723)
2005	Conv. Harvest	21,500	\$601	\$343	\$1	\$52	\$206	\$4,437,600	\$1,719,716
2006	Conv. Harvest	8,977	\$601	\$343	\$1	\$52	\$206	\$1,852,853	\$658,754
2006	Heli. Harvest	2,832	\$601	\$343	\$1	\$52	\$206	\$584,525	\$207,819
2006	Consumed Logs		100	MBF wasted in operations			(\$750)	(\$75,000)	(\$26,665)
TOTALS		216,309					\$216	\$42,870,778	\$24,014,525
TOTAL INDICATED VALUE =									\$24,000,000
PRESENT NET STUMPAGE VALUE =									\$111

ROUNDED ESTIMATE OF VALUE = \$24,000,000

C. The Cost Approach. The cost approach is used to determine the expenditure to construct or modify an existing property so as to render it interchangeable with the Subject. This approach will not be used in this analysis because it does not directly apply to timberland properties with large acreages of merchantable or near merchantable timber.

D. Reconciliation of Approaches. The Subject Timber was appraised by using only one approach to value. It is the purpose of this section to examine the results of this analysis, assess the level of comfort which the informed theoretical buyer and seller would have with the approach used, and to form a basis for the final estimate of value.

Two major factors have an overwhelming influence on the valuation results, both of which are critical to reach an accurate reading of current market conditions. The first factor is the reliability and appropriateness of the data used to determine value. The second factor involves the assumptions used in the analysis.

The income approach used here estimated the value of the property from the discounted net revenues produced from the management of the Subject Timber.

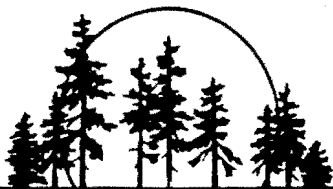
The data used in the initial stages of this analysis are very reliable, representing the current log market, actual costs incurred in the management of properties comparable to the Subject, industry norms, and the local area. The extent of sampling and the statistics associated with the timber inventory would also give a potential purchaser a high level of comfort with the results of this analysis. Furthermore, the data relates directly to specific products, eliminating any need for extrapolation or adjustment. The inherent uncertainty of this approach lies in the fact that log markets are constantly changing and that the most recent trend has shown record highs for many products, immediately followed by a significant downward adjustment.

Two of the more important factors affecting this analysis are the log price appreciation rate and the discount rate used to estimate present values of future revenues and costs. Because of the uncertainties associated with predicting log prices, projecting these flows of income is somewhat limited, especially over the twelve year period considered in this analysis.

Most purchasers deal with these elements of uncertainty by using appreciation rates that are conservative, discount rates that are generous, and sizeable profit and risk factors. All of these rates and factors will assure potential purchasers that the likelihood of making a poor investment would be minimal.

E. Final Estimate of Value. Because the methods used in this analysis are the same as those used by nearly all active purchasers in the timber market, and because the data regarding the current timber inventory, costs, and revenues are highly reliable, the results of the income approach indicate a reasonable estimate of value.

FINAL ESTIMATE OF VALUE = \$24,000,000



VIII. CERTIFICATE OF TIMBER APPRAISER

I certify that I have personally visited the Subject Property contained in this report. To the best of my knowledge and belief the statements contained in this appraisal are true and the information upon which my conclusions are drawn are correct.

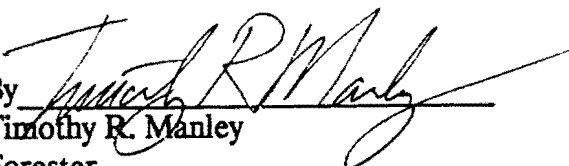
I visited one of the two timber sales discussed in the context of the timber market. Neither of these sales was used to value the Subject Timber.

My compensation and that of my company are in no way contingent upon the values reported in this appraisal.

I will not reveal the results of this appraisal, or other information specific to the Subject Property, to any other parties than the appropriate representatives of Lau & Associates, Inc., or the USDA Forest Service, without being duly authorized to do so.

The conclusions set forth in this appraisal are my own, independent of other influences, based upon the information and conditions stated above, as to the opinion of value on September 1, 1994.

The following staff members provided professional assistance to gathering of data and its analysis; Todd Hansen - Forester, Dennis Callegari - Forester, Bradford Bailey - Forestry Technician, and Eric Haller - Forest Engineer.

By 
Timothy R. Manley
Forester
Oregon Certified General Appraiser

November 16, 1994

MEMORANDUM

Department of Natural Resources

State of Alaska

Division of Land

TO: Marty Rutherford, Comm. Office
Alex Swiderski, A.G.O.

DATE: September 6, 1994

FILE NO:

THRU: Ron Swanson, Director

TELEPHONE NO: 762-2352

DRAFT

FROM: James McAllister, NRM I
Title Analysis

SUBJECT: Title Report
Shuyak Island
Acquisitions

THIS DOCUMENT IS CONFIDENTIAL UNDER ATTORNEY/CLIENT BASIS. IT IS PRODUCED FOR INTERNAL STATE USE ONLY AND MAY NOT BE DISPERSED TO THE PUBLIC, UNLESS APPROVED BY THE DIRECTOR, DIVISION OF LAND.

We were requested to provide a Title Report in support of the acquisition of land on Shuyak Island. Included in the report is an analysis of title related management issues that we felt should be addressed in the appraisal, purchase agreement, and/or in the final conveyance document. The interest to be acquired is the land estate. The mineral estate is held by the State of Alaska.

The Shuyak Island parcel contains the following described land as established by the United States, Bureau of Land Management plat of survey officially filed on the dates specified, which was used to pass title to the State of Alaska and subsequently, by the State, to the Kodiak Island Borough:

USS 1738 (9.3 acres);

USS 9221 (31.96 acres), subject to BLM case file AA-7069 parcel C;

USS 9226 lots 1 and 2 (39.92 acres), subject to BLM case file AA-7069 parcel B;

USS 9228 (20 acres more or less [split at West 1/16 line]), subject to BLM case file
AA-7069 parcel D;

and, the following:

The described land that follows is based on unsurveyed, protraction map S-23-1 (dated September 19., 1960) and the Alaska Division of Lands Grid No. S-23-1, protracted map (dated December 12, 1966) overlying the affected Tract A or B township surveys. All special surveys (United States Surveys [USS]) are excluded from the township descriptions:

DRAFT

All of the following described lands within **Township 18 South, Range 19 West, Seward Meridian**, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted January 18, 1978:

- Sec. 26: That portion of Tract A lying west of a line which runs between the corner common to Sections 31 and 32 within Tract B, T. 19 S., R. 19 W., Seward Meridian and common with Sections 5 and 6 within Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W., Seward Meridian;
- Sec. 27: All;
- Sec. 28: That portion of Tract A lying east of a line which runs between the corner common to Sections 21, 22, 27 and 28, T. 18 S., R. 19 W., Seward Meridian to the northwest $\frac{1}{16}$ corner of Section 33 within Tract A, T. 18 S., R. 19 W., Seward Meridian;
- Sec. 29: That portion of Tract A lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Shangin Bay (fractional);
- Sec. 30: That portion of the $E\frac{1}{2}E\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}$ within Tract A lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Shangin Bay (fractional);
- Sec. 32: That portion of Tract A lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Shangin Bay, west of the west shore of Shangin Bay, and that portion of Tract A lying south of the north $\frac{1}{16}$ line of Section 32 and east of the east shore of Shangin Bay (fractional);
- Sec. 33: That portion of Tract A on the east shore of Shangin Bay lying south of the north $\frac{1}{16}$ line of Section 33 to the northwest $\frac{1}{16}$ corner of Section 33, and that portion of Tract A lying south and east of a line which runs between the corner common to Sections 21, 22, 27 and 28, T. 18 S., R. 19 W., Seward Meridian to the northwest $\frac{1}{16}$ corner of Section 33 within Tract A, T. 18 S., R. 19 W., Seward Meridian;

Chart

- Sec. 34: That portion of Tract A lying west of a line which runs between the corner common to Sections 31 and 32 within Tract B, T. 19 S., R. 19 W., Seward Meridian and common with Sections 5 and 6 within Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $1/16$ corner common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W., Seward Meridian;
- Sec. 35: That portion of Tract A lying west of a line which runs between the corner common to Sections 31 and 32 within Tract B, T. 19 S., R. 19 W., Seward Meridian and common with Sections 5 and 6 within Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $1/16$ corner common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W., Seward Meridian.

All of the following described lands within **Township 18 South, Range 20 West, Seward Meridian**, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted August 5, 1992 and filed August 24, 1992:

- Sec. 35: That portion of Tract A lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Carry Inlet and east of the east shore of Carry Inlet (fractional);
- Sec. 36: That portion of the $W1/2$ within Tract A lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Carry Inlet (fractional).

All of the following described lands within **Township 19 South, Range 19 West, Seward Meridian**, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted September 4, 1992 and filed September 16, 1992:

- Sec. 3: That portion of Tract B lying west of a line which runs between the corner common to Sections 31 and 32 within Tract B, T. 19 S., R. 19 W., Seward Meridian and common with Sections 5 and 6 within Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $1/16$ corner

common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 4: All;

Sec. 5: That portion of Tract B lying above the mean high tide line of the shore
of Shangin Bay (fractional);

Sec. 6: All;

Sec. 7: All;

Sec. 8: All;

Sec. 9: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 10: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 16: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 17: All;

Sec. 18: All;

Sec. 19: All;

Sec. 20: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner

DRAFT

common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 21: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 29: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian;

Sec. 30: All;

Sec. 31: All;

Sec. 32: That portion of Tract B lying west of a line which runs between the
corner common to Sections 31 and 32 within Tract B, T. 19 S.,
R. 19 W., Seward Meridian and common with Sections 5 and 6 within
Tract A, T. 20 S., R. 19 W., Seward Meridian to the East $\frac{1}{16}$ corner
common to Sections 23 and 26 within Tract A, T. 18 S., R. 19 W.,
Seward Meridian.

All of the following described lands within **Township 19 South, Range 20 West,
Seward Meridian**, according to the United States of America, Department of the Interior,
Bureau of Land Management plat accepted September 4, 1992 and filed September 16,
1992:

Sec. 1: All;

Sec. 2: That portion of Tract B lying south, east and above the mean high tide
line on the south shore of an unnamed bay that connects to Carry Inlet
(fractional);

- Sec. 3: That portion of the E^{1/2}E^{1/2} within Tract B lying south and above the mean high tide line on the south shore of an unnamed bay that connects to Carry Inlet (fractional);
- Sec. 10: That portion of Tract B lying above the mean high tide line on the shore of an unnamed bay that connects to Big Bay, including that portion of the N^{1/2}NW^{1/4} of Tract B abutting USS 9228 lying east of the West ¹/₁₆ line (fractional);
- Sec. 11: All;
- Sec. 12: All;
- Sec. 13: (fractional) All, excluding the large unnamed lake in the W¹/₂;
- Sec. 14: (fractional) All, including the 35± acre island within the lake, excluding the large unnamed lake in the E¹/₂;
- Sec. 15: All;
- Sec. 16: All;
- Sec. 17: That portion of Tract B lying east and above the mean high tide line on the east shore of an Neketa Bay, including the island in the SW¹/₄ (fractional);
- Sec. 19: That portion of Tract B lying east and above the mean high tide line on the east shore of Neketa Bay and on above mean high tide line on both sides of the unnamed bay that connects to Shelikof Strait including all islands, islets, pinnacles and rocks above the mean high water line within the unnamed bay that connects to Shelikof Strait (fractional);
- Sec. 20: That portion of Tract B lying east and above the mean high tide line on the east shore of the unnamed bay that connects to Shelikof Strait, south, east and above the mean high tide line of the south shore of Neketa Bay, and on both sides of Shuyak Harbor (fractional);
- Sec. 21: All;
- Sec. 22: All;
- Sec. 23: All;
- Sec. 24: All;
- Sec. 25: All;
- Sec. 26: All;

- Sec. 27: That portion of Tract B lying north and above the mean high tide line on the north shore of the unnamed bay, located in the SW¹/₄SW¹/₄, that connects to Shuyak Strait (fractional);
- Sec. 28: That portion of Tract B lying north and above the mean high tide line on the north shore of the unnamed bays that connects to Shuyak Strait (fractional);
- Sec. 29: That portion of Tract B lying north and above the mean high tide line on the north shore of the unnamed bays that connects to Shuyak Strait, and both sides of Shuyak Harbor (fractional);
- Sec. 30: That portion of Tract B lying north and above the mean high tide line on the north shore of Shuyak Strait, and west of Shuyak Harbor (fractional);
- Sec. 32: That portion of Tract B lying north and above the mean high tide line on the north shore of Shuyak Strait (fractional);
- Sec. 33: That portion of Tract B lying north and above the mean high tide line on the north shore of Shuyak Strait (fractional);
- Sec. 34: That portion of Tract B lying north and east above the mean high tide line on the north shore of Shuyak Strait (fractional);
- Sec. 35: All;
- Sec. 36: All.

All of the following described lands within **Township 20 South, Range 20 West, Seward Meridian**, according to the United States of America, Department of the Interior, Bureau of Land Management plat accepted January 18, 1978:

- Sec. 2: That portion of the W¹/₂ within Tract A lying north and above the mean high tide line on the north shore of Shuyak Strait (fractional);
- Sec. 3: That portion of Tract A lying north and above the mean high tide line on the north shore of Shuyak Strait (fractional).

Containing 26,564.44 acres more or less.

Aggregating 26,665.62 acres more or less (includes the USS's cited above).

OWNERSHIP:

Dr. FT

T. 18 S., R. 19 W., Seward Meridian : On December 22, 1961, the State of Alaska applied for the subject land. On September 24, 1963, The State of Alaska received Tentative Approval to the following described land encompassing the subject lands in this township (GS-969 BLM A-056367):

T. 18 S., R. 19 W., Seward Meridian,

Sec. 8: all,

Secs. 10 - 36: all.

excluding Air Navigation Site 237.

The application was amended on September 17, 1963 and June 16, 1972 to select all available land in the township. These lands are now described as a portion of Tract "A," a plat of survey accomplished by the United States Department of the Interior, Bureau of Land Management and accepted on January 18, 1978.

On Air Navigation Site 237 was revoked but the land is now part of the Alaska Maritime National Wildlife Refuge. The Tract "A" survey will probably be re-identified as Tract "B" excluding the survey required for the Alaska Maritime National Wildlife Refuge land.

No Patent has been issued by the United States to the State of Alaska. We are awaiting survey of exclusions (such as the navigable and meanderable water bodies, valid and existing rights [mining claims, native allotments, etc., if any], and federal retained fee interests).

The Kodiak Island Borough selected the subject lands on September 6, 1977. By "Agreement of Settlement and Consent Decree" dated June 19, 1981 and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981, the State of Alaska was directed to accept and approve the municipal selection as stipulated. Final Approval was granted on May 4, 1982 for the subject lands.

NOTE: The Kodiak Island Borough (KIB) is considered to have a vested property right and equitable title for the subject land, conditioned on the State of Alaska receiving a final

patent from the United States to the land and the KIB receiving a patent from the State of Alaska after the approved KIB selection is surveyed.

No State patent has been issued to KIB. We are awaiting survey of the KIB selection by KIB and patent from the United States.

T. 18 S., R. 20 W., Seward Meridian: On December 21, 1961, the State of Alaska applied for the subject land. On October 8, 1963, the State of Alaska received Tentative Approval to the following described land encompassing the subject lands in this township (GS-973; BLM A-056371):

T. 18 S., R. 20 W., Seward Meridian,
Secs. 2 and 3: all.
Secs. 14 - 16: all.
Secs. 20 - 36: all.

The application was amended on June 16, 1972 to select all available land in the township. Sections 11 and 19 were Tentatively Approved on January 24, 1986. The township was originally surveyed by the United States Department of the Interior, Bureau of Land Management and accepted on January 18, 1978. These lands are now described as Tract "A," a supplemental plat of survey was accomplished by the United States Department of the Interior, Bureau of Land Management and accepted on August 5, 1992 and filed August 24, 1992.

Patent Number 50-93-0221 was issued by the United States to the State of Alaska on May 6, 1993 for Tract "A," encompasses the subject land in the township.

The Kodiak Island Borough selected the subject lands on September 6, 1977. By "Agreement of Settlement and Consent Decree" dated June 19, 1981 and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981, the State of Alaska was to accept and approve the municipal selection as stipulated. Final Approval was granted on May 4, 1982 for the subject lands.

On January 3, 1985, as directed by the legislature (ch. 167 SLA 1984), the "Agreement of Settlement and Consent Decree" was amended. KIB reconveyed certain lands to the State

of Alaska by Quitclaim Deeds issued December 17, 1985 and December 27, 1985. The subject land in Sections 35 and 36 are still held by KIB under the approved municipal selection.

No State patent has been issued to KIB. We are awaiting survey of the KIB selection by KIB and patent from the United States.

T. 19 S., R. 19 W., Seward Meridian: On December 21, 1961, the State of Alaska applied for the subject land. On September 23, 1963, the State of Alaska received Tentative Approval to the following described land encompassing the subject lands in this township (GS-970; BLM A-056368):

T. 19 S., R. 19 W., Seward Meridian.

Secs. 2 - 11: all.
Secs. 14 - 22: all.
Secs. 26 - 34: all.

The application was amended on June 16, 1972 to select all available land in the township. The township was originally surveyed by the United States Department of the Interior, Bureau of Land Management and accepted on January 18, 1978, and described as Tract "A." Tentative Approval was granted based on the Tract A survey. A supplemental plat of survey was accomplished by the United States Department of the Interior, Bureau of Land Management and accepted on September 4, 1992 and filed September 16, 1992 as Tract "B."

Patent Number 50-93-0397 was issued by the United States to the State of Alaska on August 16, 1993 for Tract "B." The State still has Tentative Approval as to the unapproved Native Allotment application (AA-7069, parcel "C") in USS 9221.

The Kodiak Island Borough selected the subject lands on September 6, 1977. By "Agreement of Settlement and Consent Decree" dated June 19, 1981 and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981, the State of Alaska was to accept and approve the municipal selection as stipulated. Final Approval was granted on May 4,

1982 for the subject lands. The Final Approval was conveyed "subject to" the Native Allotment application (AA-7069, parcel "C") in USS 9221.

No State patent has been issued to KIB. We are awaiting survey of the KIB selection by KIB and patent from the United States.

T. 19 S., R. 20 W., Seward Meridian: On December 21, 1961, the State of Alaska applied for the subject land. On December 5, 1963, the State of Alaska received Tentative Approval (amended July 13 1984) to the following described land encompassing the subject lands in this township (GS-971; BLM A-056369):

T. 19 S., R. 20 W., Seward Meridian.

Secs. 1 - 30: all.

Secs. 32 - 36: all.

Excluding USS's 1699, 1700, 1701, 1738, & 2932, and a five-acre tract within Homesite application A-053681.

Subject to A-015055 water pipeline Right-of-way (see BLM decision of July 13, 1984).
Administration transferred to State effective date of T.A. (See ADL 220919)

The application was amended on June 16, 1972 to select all available land in the township. The land within A-053681 was Tentatively Approved on July 13, 1984. The township was originally surveyed by the United States Department of the Interior, Bureau of Land Management as Tract "A," accepted on January 18, 1978.

USS 1700 was canceled and Homesite Application A-015055 was closed (February 7, 1966) with no conveyance by BLM. These lands are now described as Tract "B" under a supplemental plat of survey accomplished by the United States Department of the Interior, Bureau of Land Management and accepted on September 4, 1992 and filed September 16, 1992. Neither the original Tract "A" survey nor the supplemental plat that created the Tract "B," depict islands, rocks, islets or pinnacles offshore.

Patent Number 50-93-0397 was issued by the United States to the State of Alaska on August 16, 1993 for Tract "B" (accepted on September 4, 1992 and filed on September 16, 1992) the area containing the subject land in the township. The State still has Tentative

Approval as to the land within unapproved Native Allotment application (AA-7069, parcels "B" and "D"; USS's 9226 and 9228).

The Kodiak Island Borough selected the subject lands on September 6, 1977 and final approval was granted on May 4, 1982. By "Agreement of Settlement and Consent Decree" dated June 19, 1981 and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981, the State of Alaska was to accept and approve the municipal selection as stipulated. Final Approval was granted on May 4, 1982 for the subject lands. The Final Approval was conveyed "subject to" the Native Allotment application (AA-7069, parcel "B" and "D"; USS's 9226 and 9228).

On January 3, 1985, as directed by the legislature (ch. 167 SLA 1984), the "Agreement of Settlement and Consent Decree" was amended. On January 10, 1985, the "Final Approval" was amended to reflect new lands granted to KIB.

No State patent has been issued to KIB. We are awaiting survey of the KIB selection by KIB and patent from the United States.

T. 19 S., R. 20 W., Seward Meridian: On September 20, 1963, the State of Alaska applied for the subject land. On March 9, 1964, the State of Alaska received Tentative Approval to the following described land encompassing the subject lands in this township (GS-1254; BLM A-059923):

T. 19 S., R. 20 W., Seward Meridian.
USS's 1700, 1701 and 1738.

Patent Number 50-64-0158 was issued by the United States to the State of Alaska on May 15, 1964 for USS's 1701 and 1738, the land area containing the subject land in the township.

USS 1700 was canceled and our selection could not attach, but the selection under GS 971 picked it up on amendment. The land formerly within USS 1700 was found proper for selection on October 7, 1985, and became part of GS-971. The land formerly within USS 1700 was surveyed as part of Tract "B," and conveyed to the State under Patent Number 50-93-0397 on August 16, 1993.

The Kodiak Island Borough selected the subject lands on February 28, 1968 and final approval was granted on April 7, 1980.

State patent has been issued to KIB. State Patent No. 5225 was issued for USS 1738 on July 31, 1980 for the land estate (mineral estate was reserved by the State of Alaska). The reserved easements to and along platted water bodies within USS 1738 were released on January 31, 1983. State Patent No. 5226 was issued for USS 1701 on July 31, 1980 for the land estate (mineral estate was reserved by the State of Alaska). The reserved easements to and along platted water bodies within USS 1701 were released on January 31, 1983.

T. 20 S., R. 20 W., Seward Meridian: On December 21, 1961, the State of Alaska applied for the subject land. On December 5, 1963 received Tentative Approval to the following described land encompassing the subject lands in this township (GS-971; BLM A-056369):

T. 20 S., R. 20 W., Seward Meridian,
Secs. 1 - 3: all.

The application was amended on June 16, 1972 to select all available land in the township. The township was originally partially surveyed by the United States Department of the Interior, Bureau of Land Management as Tract "A," accepted on January 18, 1978.

On January 18, 1984, the State attempted to relinquish sections 1 and 3 of T. 20 S., R. 20 W., Seward Meridian to accomplish Section 1427 of the Alaska National Interest Lands Conservation Act (ANILCA) of December 2, 1980. By decision dated December 10, 1984, BLM declared that the relinquishment of those lands was of no effect.

Patent Number 50-85-0082 was issued by the United States to the State of Alaska on December 28, 1984 for Tract "A," the land area containing the subject land in the township.

The Kodiak Island Borough selected the subject lands on September 6, 1977 and final approval was granted on May 4, 1982. By "Agreement of Settlement and Consent Decree" dated June 19, 1981 and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981, the State of Alaska was to accept and approve the municipal selection as stipulated. Final Approval was granted on May 4, 1982 for the subject lands.

32A

No State patent has been issued to KIB. We are awaiting survey of the KIB selection by KIB and patent from the United States.

USS 1701 - USS 1701 has been subsequently conveyed to a third party by KIB (Quitclaim Deed issued on or about December 17, 1984, Recorded in the Kodiak Island Recording District in Book 71 at page 221) and is not available for acquisition.

DISCUSSION:

Survey Problem

Apparently BLM cadastral survey standards change depending on who makes the selection. For Native Corporation selections in the Unalaska Island area, BLM surveyed land above the mean high tide line as small as 0.01 acre. At about the same time period, on Shuyak Island, where the supplemental plat for T. 19 S., R. 20 W., Seward Meridian, creating Tract "B," an island approximately 35 acres in size was not surveyed nor were any of the other small islands surveyed. A little further south, land adjacent to Afognak Island was labeled as "unsurveyed."

To complicate matters further, Section 31 was created by an independent survey within T. 19 S., R. 20 W., Seward Meridian, between the time of the Tract "A" and Tract "B" surveys without impact to Tract "A" or Tract "B." This would mean that the original Tract "A" survey was not a survey of the entire township, but merely a survey of the State selected land approved for disposal within the township. Small features above the mean high tide line off-shore were incorporated by reference to the Chugach National Forest boundary - everything north of boundary. However, BLM failed to note the surveyed location of the Chugach National Forest boundary.

Since the Act of August 16, 1988 (Pub.L. 100-395; 102 Stat. 979), the Bureau of Land Management, "Manual of Surveying Instructions" (1973 Manual) was to be followed. The 1973 Manual was to be followed as modified by the Memorandum of Agreement of March 28, 1984, which was incorporated into Section 901(b)(2) of Alaska National Interest Land Conservation Act (ANILCA) by express reference.

Even with a plat note on the original Tract "A" survey (approved January 18, 1978) that asserts that survey "includes all land and all islands, islets, and rocks, above the line of mean high tide at the time of survey, lying north of the national forest boundary, regardless of whether or not they are shown on this plat," there is a cloud on title for the islands. The cloud on title was introduced when BLM approved the supplemental plat (September 4, 1992) segregating one large lake and certain U.S. Surveys without showing the offshore islands, and without a new plat note. The purpose for the plat note was to preclude the appearance of creating omitted lands due to platting criteria. The hydrography was derived from U. S. Geological Survey maps based on 1952 aerial photography. U.S.G.S Quadrangle Afognak C-2 and C-3 was photo-revised on October 25, 1988, using 1978 CIR photography.

The 1973 Manual, at page 97 Section 3-122 (Islands), states that "[e]ven though the United States has parted with its title to the adjoining mainland, an island in a meandered body of water, navigable or nonnavigable, in continuous existence since the date of the admission of the State into the Union, and omitted from the original survey, remains public land of the United States . . . such island is subject to survey and disposal when identified." The BLM action described above might be considered a gross error at some later time (see Northern Michigan Exploration Co.; 114 IBLA 177, April 23, 1990).

KIB Selection

"Agreement of Settlement and Consent Decree" (Consent Decree) dated June 19, 1981, and accepted by the Superior Court (3AN-80-3070 CIV) on August 12, 1981 (Recorded in the Kodiak Island Recording District on May 11, 1982 in Book 56 at page 262). The State of Alaska was directed to approve a portion of the municipal selection. In addition, three (3) specific easements across State retained land on the east coast of Shuyak Island were granted to KIB to access the KIB selected land further inland. On January 3, 1985, as directed by the legislature (ch. 167 SLA 1984), the "Agreement of Settlement and Consent Decree" was amended (Recorded in the Kodiak Island Recording District on February 5, 1985 in Book 72 at page 32). An exchange of equal acreage was achieved.

The Consent Decree was not an attempt to "legislate" an individual entitlement for KIB. Its main function was to allow for the selection of certain lands that previously were not considered vacant, unappropriated, unreserved land due to discretionary administrative action (land classification). The settlement also restricted certain management/disposal actions by both parties under the agreement. All other aspects of state law and the Municipal Entitlement Act, as codified in the Alaska Statutes, were to be followed where applicable.

Pursuant to AS 29.65.040, the municipal entitlement is a vested property right. However, the entitlement is not associated with any specific piece of land. If insufficient land was available, the municipality would be compensated with money under a specific formula. AS 29.65.080 (October 1992).

By definition an "approved selection" means "a municipal land selection that has been approved in writing by the director for transfer by patent to a municipality." AS 29.65.130 (1) (October 1992). By definition a "patent" means "a document, issued by the director to a municipality for a previously approved selection, that conveys and quitclaims all the right, title, and interest of the state without reservation or condition except as may be required by law." AS 29.65.130 (6) (October 1992).

The director may approve municipal selections of land that have been tentatively approved or patented to the state by the federal government but may not issue patent to a municipality until the land has first been patented to the state. After approval of a selection by the director, but before patent to a municipality, the municipality may execute conditional leases and make conditional sales only with the consent of the director. Conditional sales and conditional leases made before July 1, 1978, do not require the consent of the director. AS 29.65.070(b) (October 1992).

The State of Alaska has not issued a patent to KIB because two statutory requirements have not been met. First, the State of Alaska has not received a patent for all of the KIB selected land from the federal government. Second, the State of Alaska cannot issue a patent until the KIB selection is adequately surveyed.

Since the approved KIB municipal selection is based on four separate metes and bounds descriptions resulting from the "Consent Decree" and the legislatively directed amendment, the land cannot be described by aliquot parts. Two of the four metes and bounds descriptions describe land to be excluded and reconveyed to the State of Alaska by quitclaim deed from land previously described without returning a new description that describes the residual selection.

This lack of survey is not critical for title acquisition purposes if the interest KIB holds is acquired by the State and is allowed to merge with the underlying State interest. It becomes a management concern if title restrictions are imposed as a result of the conveyance or if the Legislature wants DNR to distinguish the land interests purchased by EVOS funds from the surrounding land.

After final approval of a municipal selection, we believe that KIB holds a vested property right and an equitable title interest sufficient to allow KIB to dispose of an interest to others. Of course such disposals are conditional. However, if the State of Alaska is acquiring what interest the KIB has in the subject lands, then it follows that the State of Alaska must be consenting in their own acquisition. The interest that KIB has will merge with the residual state interest, and the result will be that the State will hold the same title interest as before KIB's entitlement was approved, subject to any valid existing rights. However, should KIB retain any interest whatsoever, on land that has not patented to them, then there could remain an obligation by the State to issue a patent. Issuing the patent would then create a "wild deed" situation and a rather cumbersome after-acquired-title problem for the State.

USS 1738 - Title to USS 1738 is still held by KIB, subject to a lease issued to the Alaska State Division of Fish and Wildlife Protection on or about March 4, 1991 (Recorded in the Kodiak Island Recording District in Book 105 at page 743).

Mining Claims

ADL 302680 - William N. Nietupski, Notice of Location (March 16, 1977); Closed - Failure to pay annual rent (June 30, 1990). Outside of subject land area, but may be important to any park designation (See also ADL 561470). Mr. Nietupski continues to file annual labor affidavits. Located on the following land:

T. 19 S., R. 19 W., Seward Meridian,

Sec. 28: "1 Big Fort Discovery" within the SE $\frac{1}{4}$, containing approximately 39 acres.

ADL 561470 - Debra Kay Nielsen, Notice of Location (April 4, 1994); Active. Outside of subject land area, but may be important to any park designation. Located on the following land:

T. 19 S., R. 19 W., Seward Meridian,

Sec. 28: "Big Fort 1 Discovery" within the SE $\frac{1}{4}$, containing approximately 40 acres.

Water Rights & Access

ADL 39839 - Wayne Treat, Certificate Issued (July 13, 1982). Located on the following land:

T. 19 S., R. 20 W., Seward Meridian,

Sec. 33: Four small lakes at Port Williams.

Navigable Waters

Navigable waters were not addressed by the Bureau of Land Management. We may be purchasing some land we already own under the equal footing doctrine as confirmed by the 1953 Submerged Lands Act extended by Section 6(m) of the Alaska Statehood Act. However, using state standards, one large inland lake within Sections 13 and 14 of T. 19 S., R. 20 W., Seward Meridian, has been excluded. Easements required under AS 38.05.127 would have been established upon survey of the affected land.

Ten (10) anadromous streams are found within the Shuyak parcel. Easements required under AS 38.05.127 would have been established upon survey of the affected land.

Rights-of-way

Section line easements would have been automatically established for all surveyed sections under AS 19.10.010. By an opinion from the Alaska Attorney General's Office (1969 Op. Att'y Gen. No. 7), these section line easements may also exist for protracted sections under an officially approved protraction map.

ADL 220919 - H Bruce Cooper, Private Easement. BLM first issued Right-of-way for water pipeline and storage reservoir to Washington Fish & Oyster Company on November 30, 1951 (BLM A-015055). It was assigned by BLM to Wayne Treat on August 30, 1984, and reassigned to Mr. Cooper on June 4, 1987. Located on the following land:

T. 19 S., R. 20 W., Seward Meridian,

Sec. 28: SE $\frac{1}{4}$, (portion);

Sec. 33: NE $\frac{1}{4}$, (portion).

Right-of-way 100 feet in width, containing 6.4 acres.

Existing Lessee

The Alaska State Division of Fish and Wildlife Protection has leased land from KIB located in USS 1738, and is a State agency. Their interest would necessarily merge upon acquisition by the State of the KIB's interest. A decision will be required to determine if the use shall continue after the acquisition.

ENCUMBRANCES OF RECORD:

"Port Williams Agreement" - The agreement between the State of Alaska and the Port Williams, which is currently noted to our records, is without force or effect and will be removed from our records. The Port Williams native corporation never received official recognition as a valid Alaska Native Claims Settlement Act corporation. Therefore no withdrawal of the core township was made and no land was conveyed under ANCSA.

Native Allotment

"Native Allotment Application (AA-7069)" - This application was filed by Neil Sargent on March 13, 1972 for four (4) parcels of land totaling approximately 160 acres. Three (3) of the parcels are on land that we would acquire. The fourth is on land currently within the Shuyak Island Park. The Bureau of Land Management has taking no title recovery action or requested reconveyance. No "Aguilar" hearing procedure has been initiated.

As for Neil Sargent's Native Allotment application (AA-7069), several options are available. There is the possibility that the land to be acquired by this proposed purchase would be placed within the Shuyak Island Park. The State's title was received subject to valid existing rights. However, the native allotment application was not filed until after the State had received tentative approval (title) to its selection. After two field examinations by BLM staff (1975 and 1986), the validity of the native allotment application remains in question.

A "cession of use" finding is a very real possibility for Mr. Sargent's claim, who ceased all significant and exclusive use of the land in 1932. His claimed use began in 1925 when he was only five (5) years old. His use since was for periodic hunting and fishing trips. Using the land in conjunction with the general public's use. The native allotment may not survive judicial review should the United States seek title recovery.

It is recommended that we acquire KIB's interest in the native allotment parcels. If it is in the State's best interest, we could either defend the title interest through a forced judicial review, or settle and offer replacement land (state land) located elsewhere (Section 3 of Public Law 102-415, October 14, 1992, amending Section 18 of ANSCA: 43 USC 1617; See also Alaska Senate Bill 293 [1994]). We would negotiate an amended land description, which if accepted would be conveyed to the United States and the land automatically conveyed to the native allotment applicant (no validity determination required).

ATTACHMENTS:

- A copy of the computerized title record as indicated on the State recording system.
- Survey Plats for the subject land.
- Bureau of Land Management- Master Title Plats
- State of Alaska - Status Plats
- U.S.G.S. Quads
- United States Patent No. 50-64-0158, 50-85-0082, 50-93-0221, 50-93-0397,

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen									
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)		
			Merch.	Height	Basal	# Of	Adjusted Net		
			DBH		Area	Stems	Inventory	Estimated Harvest	
1	86	5	16.0	42	275	249	1,427,600	1,031,011	
3	62	3	19.6	50	253	179	1,310,267	1,468,987	
5	26	2	29.1	80	270	67	755,352	857,844	
6	15	1	21.5	74	282	120	507,656	584,403	
7	13	1	20.5	61	240	133	294,320	328,640	
8	3	1	24.8	71	313	104	93,938	105,563	
9	8	1	16.2	50	200	145	84,800	94,720	
10	7	1	19.8	60	375	185	208,687	250,688	
11	22	1	25.2	64	810	269	1,585,980	1,698,840	
12	37	2	20.6	65	260	121	979,020	1,084,100	
13	190	11	20.1	58	225	135	3,849,055	4,291,928	
14	16	*	23.3	69	305	129	486,259	522,654	
15	5	*	19.8	60	375	185	149,062	179,063	
16	113	6	15.8	52	313	287	3,041,583	3,159,292	
17	211	11	22.9	78	347	160	13,001,677	13,565,140	
18	41	2	23.3	69	305	129	1,246,039	1,339,300	
19	17	1	20.7	77	240	132	569,840	601,120	
20	43	2	20.1	66	313	239	1,511,719	1,849,000	
21	28	2	20.5	62	240	137	621,040	675,360	
22	148	6	20.5	62	344	189	4,498,259	5,152,445	
23	12	1	29.0	87	450	101	681,480	734,400	
24	7	*	24.8	71	313	104	219,188	246,313	
25	85	4	20.0	49	240	128	1,275,000	1,407,600	
26	31	2	18.3	50	220	140	474,920	527,620	
27	33	1	16.0	44	375	282	670,313	709,500	
28	6	1	13.8	42	240	268	94,080	100,320	
29	171	6	20.9	71	333	202	7,059,095	7,518,658	
30	18	*	22.9	78	347	160	1,109,148	1,157,216	
31	358	19	25.5	78	219	84	11,015,849	11,741,640	
32	20	1	19.4	42	200	141	182,400	192,000	
33	21	1	21.8	70	540	224	1,071,630	1,343,790	
34	21	1	21.7	79	280	115	714,000	808,080	
35	22	*	21.8	70	540	224	1,122,660	1,407,780	
36	98	5	20.3	67	261	131	2,574,729	3,180,799	
37	57	3	21.2	68	240	107	1,561,040	1,755,600	
38	25	2	17.4	51	220	148	331,500	365,000	
39	55	3	22.1	71	224	98	1,212,288	1,413,720	
40	10	1	24.0	74	324	110	320,220	337,500	
41	20	2	25.9	85	310	97	983,940	1,060,820	
42	16	1	31.0	94	324	65	738,720	969,408	
43	5	*	31.0	94	324	65	230,850	302,940	
44	79	4	18.3	53	211	139	1,335,689	1,415,348	
45	18	1	18.2	51	200	141	370,800	410,400	
46	10	1	25.8	74	188	56	248,570	265,454	
47	10	*	25.8	74	188	56	248,570	265,454	
48	136	7	24.9	71	229	98	4,176,367	4,719,588	
49	19	1	25.8	76	200	59	495,520	555,560	
50	19	1	27.2	84	200	50	594,320	624,720	
51	9	*	22.8	60	200	75	150,120	155,160	
54	200	9	21.6	64	244	115	4,986,667	5,272,890	
55	32	1	21.8	59	200	91	500,480	567,040	
56	54	3	18.1	55	267	179	1,188,000	1,302,480	
57	43	1	20.3	69	570	324	2,906,886	3,345,615	
58	13	1	22.8	60	200	75	216,840	224,120	

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
			Average		Per Acre		Total Volume (BF)	
					Basal	# Of	Adjusted Net	
Type	Acres	Plots	DBH	Height	Area	Stems	Inventory	Estimated Harvest
59	25	1	19.2	61	240	135	577,000	608,000
60	41	2	17.4	52	200	165	645,340	686,340
61	18	*	18.2	51	200	141	370,800	410,400
62	26	1	21.0	79	270	130	839,532	978,588
63	287	14	22.3	66	214	100	5,894,980	6,639,540
64	83	4	22.4	69	270	120	2,426,090	2,672,600
65	54	3	20.9	65	227	127	1,185,120	1,384,560
66	47	4	26.8	82	260	84	1,902,560	2,044,500
67	19	1	19.8	61	240	125	393,680	411,920
68	30	2	23.9	67	220	77	634,800	717,000
69	87	6	24.5	74	315	111	3,038,040	3,483,567
70	11	1	24.1	72	280	94	307,560	345,400
71	23	1	27.8	82	168	56	712,734	769,165
72	92	5	20.8	68	208	95	2,036,256	2,263,936
73	96	5	20.9	61	264	124	2,469,024	2,731,780
74	10	1	22.6	64	200	81	188,000	207,200
75	16	1	21.9	72	378	166	840,672	916,704
76	34	3	19.7	59	240	143	736,213	770,213
77	31	2	22.0	59	240	94	637,980	704,320
78	16	1	22.7	63	280	127	448,640	480,640
79	12	1	16.0	59	200	160	264,480	278,880
80	383	22	23.2	67	268	114	11,840,900	13,155,040
81	38	2	21.5	63	297	151	1,193,238	1,246,590
82	31	2	21.2	69	240	111	918,840	972,780
83	74	3	22.6	60	187	76	1,137,627	1,410,933
84	54	3	21.3	70	245	118	1,631,160	1,774,404
85	109	7	22.3	70	241	103	3,481,386	3,734,286
86	41	1	23.4	74	200	85	1,072,560	1,111,920
87	50	3	23.3	70	347	134	1,837,333	2,020,000
88	39	2	22.9	60	250	97	811,688	910,406
89	17	1	20.4	60	400	262	597,720	756,160
90	17	1	27.1	77	438	159	1,099,687	1,207,000
91	3	*	20.0	64	240	147	72,780	77,580
92	19	2	18.3	64	313	200	640,063	689,938
93	34	2	24.9	61	375	119	1,058,250	1,140,063
94	28	1	20.3	63	438	230	1,239,000	1,386,000
95	10	1	22.2	67	282	115	264,742	301,824
96	87	4	22.4	67	297	143	2,796,234	3,156,469
97	69	4	20.3	55	297	174	1,741,172	1,873,781
98	7	1	27.1	78	201	55	222,879	231,858
99	14	2	20.0	64	240	147	339,640	362,040
100	19	1	18.5	59	320	196	460,560	519,080
101	28	1	20.0	62	160	94	440,160	510,720
102	44	2	21.2	75	344	160	1,769,625	1,828,750
103	35	1	16.6	40	200	152	294,000	334,600
104	17	2	19.0	63	406	239	712,938	738,969
105	11	1	15.0	40	126	127	85,484	92,678
106	28	2	19.3	62	281	163	723,625	756,880
107	85	5	22.6	67	250	103	2,091,585	1,910,931
108	18	1	23.0	68	250	99	587,250	517,950
109	26	2	22.0	58	180	89	371,280	260,624
110	26	3	19.1	67	227	125	627,467	575,051
111	47	4	23.3	62	282	127	1,287,857	1,034,587
112	46	3	16.0	45	203	182	606,949	432,055

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)	
			DBH	Merch. Height	Basal Area	# Of Stems	Adjusted Net Inventory	Estimated Harvest
113	97	6	17.7	54	354	297	2,853,416	2,404,791
114	48	3	16.5	53	253	202	1,013,760	848,896
115	38	2	18.1	52	200	146	656,640	584,896
116	200	10	17.8	51	306	238	4,407,500	3,683,500
117	45	2	14.5	50	320	378	1,263,600	1,160,640
118	25	*	17.8	51	306	238	550,938	460,438
119	10	1	14.3	55	194	189	190,849	181,737
120A	10	*	14.1	55	320	344	279,200	254,560
120B	5	*	14.5	50	320	378	140,400	128,960
121	9	1	14.1	55	320	344	251,280	229,104
122	46	3	20.2	68	253	137	1,351,787	1,302,720
123	97	5	14.1	40	263	346	1,646,430	1,279,261
124A	25	2	14.9	45	305	290	518,100	453,323
124B	64	3	16.9	51	253	203	1,314,987	1,097,899
124C	58	3	17.3	55	213	159	1,069,520	917,947
124D	5	*	14.1	55	320	344	139,600	127,280
125	65	4	13.6	40	200	244	883,350	675,870
126	76	5	19.0	62	305	199	2,159,312	2,009,675
127	57	3	15.7	45	375	363	1,673,188	1,462,288
128	126	6	20.9	67	274	146	3,623,580	3,335,744
129	116	5	15.0	42	288	348	2,230,912	1,628,826
130	72	3	14.9	41	213	223	927,360	749,184
134	38	2	22.0	48	240	119	423,320	303,544
136	109	6	17.7	43	313	253	1,764,326	1,292,247
137	28	2	16.9	47	260	246	520,240	379,120
139	106	7	18.0	53	234	173	2,017,029	1,635,186
140	113	2	19.8	63	282	159	2,797,976	2,360,908
141	16	1	15.3	54	381	326	524,462	405,979
142	57	2	22.5	67	282	131	1,725,749	1,543,810
143	23	1	16.8	57	200	138	343,160	253,368
144	26	2	13.0	49	240	320	662,480	552,656
145	163	5	16.8	62	363	289	6,177,701	5,463,761
146	68	4	14.4	38	217	238	719,260	463,037
147	50	3	21.7	66	333	169	1,722,917	1,647,917
148	73	6	18.7	60	247	155	1,883,400	1,603,080
150	25	2	12.0	32	220	307	277,500	188,700
151	336	21	19.6	62	298	181	9,519,232	7,718,554
152	66	3	16.1	51	345	308	1,937,004	1,713,716
153	13	1	14.6	46	126	142	113,452	91,481
156	19	2	15.5	47	220	203	234,840	182,856
157	13	1	17.4	55	200	132	224,120	203,736
158	41	3	18.0	52	333	221	1,030,125	911,908
159	48	3	16.1	47	219	222	814,416	602,051
160	167	9	16.9	56	236	219	3,943,427	3,362,118
161	12	1	15.5	44	372	357	362,328	284,357
162	33	3	21.1	71	292	140	1,216,188	1,205,188
163	19	2	18.9	58	280	168	483,740	453,948
164	25	2	15.7	46	180	164	300,000	227,600
165	15	1	19.2	64	240	145	379,800	356,280
166	22	2	16.1	50	151	148	314,254	276,691
167	19	1	13.0	33	313	406	301,625	234,175
168	43	5	14.5	39	251	273	609,444	531,869
169	98	7	14.5	43	183	187	1,295,280	1,197,616
170	798	36	17.8	51	234	169	13,956,101	12,305,263

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)	
			DBH	Merch. Height	Basal Area	# Of Stems	Adjusted Net Inventory	Estimated Harvest
171A	2,738	166	14.5	38	191	216	30,880,701	20,662,605
172	718	42	14.6	39	175	189	6,941,352	4,788,719
174	149	8	15.0	42	267	276	2,260,792	1,622,949
175	120	8	15.2	41	276	270	1,960,215	1,747,858
176	61	5	16.3	46	281	277	1,182,546	883,714
177	25	1	12.9	37	196	247	291,200	198,240
179	63	4	15.6	41	270	233	977,760	670,824
180	48	3	16.6	47	342	276	1,128,384	903,053
181	30	2	13.2	31	240	320	282,000	174,480
182	21	1	19.2	56	310	162	631,470	474,188
183	26	2	15.2	45	200	194	356,720	283,504
184	36	2	13.7	45	306	357	943,290	807,930
186	44	3	18.1	47	270	210	803,880	561,211
188	10	*	18.1	47	270	210	182,700	127,548
189	65	4	12.6	34	140	185	457,730	276,822
190	39	2	12.1	33	200	295	447,720	331,656
194	88	4	17.1	38	240	186	961,840	627,440
195	64	4	13.6	36	210	252	745,920	490,176
196	30	2	16.8	55	329	259	846,000	730,944
197	44	3	15.3	45	200	195	628,320	517,557
199	120	7	15.1	45	240	225	2,176,200	1,734,622
201	22	2	13.6	32	151	189	153,430	101,374
204	115	6	16.7	46	274	238	2,020,728	1,677,435
205	180	11	17.3	54	269	209	4,976,509	3,343,811
206	42	4	15.5	45	210	192	697,693	457,153
207	46	3	13.1	38	168	210	542,667	465,570
209	3	*	15.5	45	210	192	48,903	31,822
211	98	5	17.8	61	208	136	2,353,735	1,843,594
212	217	14	16.2	51	206	172	4,197,334	3,106,246
213	181	16	14.8	41	220	246	2,345,258	1,800,126
214	224	15	17.5	57	285	227	6,816,768	5,096,448
215	124	9	14.4	43	258	281	2,048,480	1,582,020
217	10	*	19.7	57	202	169	199,980	145,128
218	4	*	19.7	57	202	169	79,992	58,051
222	434	27	13.9	36	188	232	4,173,472	2,536,746
226	10	*	15.6	45	235	202	156,310	128,522
227	15	1	15.6	45	235	202	192,923	154,057
229	68	4	16.8	52	258	187	1,533,718	1,021,734
232	61	4	15.6	42	250	238	893,650	589,626
233	56	5	13.4	38	248	317	602,040	588,120
236	30	2	20.7	71	300	150	886,800	851,760
237	137	11	14.4	41	226	266	1,819,584	1,372,755
238	125	7	18.5	55	263	171	2,471,429	2,019,429
243	259	16	16.2	45	296	269	5,384,236	4,261,495
247	84	6	13.6	33	159	192	606,816	399,840
250	116	6	16.4	43	193	166	969,760	820,661
251	68	3	16.4	38	320	254	887,627	571,381
252	33	2	14.1	36	140	185	287,760	234,432
253	7	*	13.4	38	267	338	115,740	86,652
254	6	*	13.4	38	267	338	96,400	71,536
255	149	10	21.1	50	228	135	2,513,332	1,834,846
256	4	*	16.2	45	296	269	84,880	66,573
257	112	8	17.9	50	220	146	1,747,760	1,440,880
258	105	8	15.1	45	250	238	1,681,050	1,328,670

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)	
			DBH	Merch. Height	Basal Area	# Of Stems	Adjusted Net Inventory	Estimated Harvest
259	106	4	16.5	48	260	211	1,828,500	1,192,500
261	30	1	13.1	36	280	360	456,000	364,800
262	90	6	13.4	38	267	338	1,446,600	1,080,840
265	30	2	15.2	56	260	239	867,000	748,440
266	69	4	21.5	56	375	197	2,023,720	1,318,132
270	76	4	15.1	45	230	244	1,289,720	997,272
272	31	*	14.0	39	252	284	437,081	325,180
275	105	7	11.9	32	178	265	1,021,408	621,718
276	78	5	14.3	35	60	60	199,992	132,350
277	106	4	14.0	39	252	284	1,456,237	1,073,608
279	12	1	12.0	30	120	183	62,880	41,376
282	28	1	13.0	37	238	278	372,232	339,483
284	21	1	19.7	57	202	169	419,957	304,769
TOTALS	17.878	1.027	17.6	51	242	191	366,184,639	297,601,686

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
	Total Volume (BF)	SITKA SPRUCE						
	Adjusted Net	Total Net Volume by Sort (BF)						
Type	Estimated Harvest	1	2	3	4	5	6	7
1	957,180	117,605	251,550	0	198,875	0	0	389,150
3	916,773	98,373	339,760	0	85,147	129,787	0	263,707
5	577,886	44,366	107,406	0	43,524	316,602	0	65,988
6	441,189	16,617	0	0	229,537	90,829	0	104,207
7	208,208	21,528	0	0	0	88,920	0	97,760
8	78,488	3,863	17,063	0	33,563	0	0	24,000
9	77,888	1,728	0	0	0	0	0	76,160
10	183,137	6,387	0	0	64,313	112,438	0	0
11	1,340,460	61,380	799,920	0	227,700	0	0	251,460
12	836,940	35,520	0	0	387,760	0	142,820	270,840
13	2,985,695	215,840	134,036	0	1,062,618	318,509	126,436	1,128,255
14	450,240	9,005	207,486	0	128,694	0	0	105,056
15	130,812	4,562	0	0	45,938	80,313	0	0
16	2,738,367	75,804	596,781	0	679,177	0	297,802	1,088,802
17	12,044,504	239,293	1,487,790	0	3,983,824	1,143,716	496,330	4,693,551
18	1,153,740	23,075	531,682	0	329,777	0	0	269,206
19	527,408	10,608	294,440	0	0	67,320	0	155,040
20	1,323,594	47,031	435,375	0	384,313	162,594	88,688	205,594
21	530,992	22,512	0	0	59,920	182,560	96,880	169,120
22	3,712,772	196,372	86,839	0	899,652	1,236,587	60,208	1,233,114
23	581,256	25,056	79,920	0	224,640	235,440	0	16,200
24	183,138	9,013	39,813	0	78,313	0	0	56,000
25	1,010,480	66,130	205,700	0	435,200	56,950	0	246,500
26	444,168	7,688	129,580	0	88,660	37,820	0	180,420
27	523,463	36,713	0	0	0	0	0	486,750
28	83,136	2,736	0	0	0	0	0	80,400
29	6,345,170	178,481	1,277,156	0	1,720,688	1,610,250	536,156	1,022,438
30	1,027,493	20,414	126,921	0	339,852	97,568	42,341	400,398
31	10,070,427	236,355	795,137	0	4,213,095	3,442,076	45,975	1,337,789
32	131,200	12,800	0	0	0	0	0	118,400
33	962,766	27,216	542,430	0	0	190,890	0	202,230
34	654,864	14,784	0	0	247,800	314,160	0	78,120
35	1,008,612	28,512	568,260	0	0	199,980	0	211,860
36	1,663,917	227,703	248,617	0	265,689	205,936	156,853	559,121
37	1,241,232	79,952	47,880	0	413,440	322,240	53,200	324,520
38	292,700	9,700	0	0	81,500	0	81,500	120,000
39	1,165,965	11,581	270,424	0	291,368	245,168	0	347,424
40	267,948	13,068	0	0	147,420	64,260	0	43,200
41	977,988	1,488	0	0	600,780	83,700	0	292,020
42	727,661	2,765	0	0	337,824	281,664	0	105,408
43	227,394	864	0	0	105,570	88,020	0	32,940
44	968,143	91,886	0	0	151,909	353,837	66,692	303,818
45	355,824	3,744	0	0	80,640	153,360	75,600	42,480
46	179,908	17,165	0	0	67,067	75,040	0	20,636
47	179,908	17,165	0	0	67,067	75,040	0	20,636
48	3,064,741	277,906	125,120	0	394,011	1,809,966	0	457,737
49	481,536	3,496	0	0	38,760	397,480	0	41,800
50	537,776	14,136	0	0	186,200	249,280	0	88,160
51	97,416	13,176	0	0	0	42,480	0	41,760
54	4,175,289	202,844	363,556	0	1,464,000	1,058,667	0	1,086,222
55	482,048	4,608	0	0	0	295,680	0	181,760
56	993,312	48,672	0	0	144,000	180,720	0	619,920
57	2,238,253	167,158	0	0	671,574	637,260	0	762,261
58	140,712	19,032	0	0	0	61,360	0	60,320

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
Type	Total Volume (BF)	SITKA SPRUCE						
	Adjusted Net	Total Net Volume by Sort (BF)						
	Estimated Harvest	1	2	3	4	5	6	7
59	552,200	6,200	0	0	0	238,000	0	30,000
60	499,708	36,408	0	0	75,440	205,820	0	18,000
61	355,824	3,744	0	0	80,640	153,360	75,600	42,480
62	818,239	5,323	0	0	220,428	352,404	0	240,084
63	4,983,140	227,960	378,020	0	1,428,440	1,516,180	38,540	1,394,000
64	2,139,242	71,712	0	0	363,540	1,122,160	0	581,830
65	1,018,080	41,760	0	0	259,200	372,240	0	344,880
66	1,490,088	103,118	301,270	0	394,330	391,980	59,220	240,170
67	295,792	24,472	0	0	83,600	157,320	0	30,400
68	500,400	33,600	0	0	57,000	275,400	0	134,400
69	2,493,698	136,085	0	0	738,369	980,316	0	638,928
70	231,176	19,096	0	0	60,280	107,360	0	44,440
71	646,562	16,543	0	0	81,168	406,614	0	142,238
72	1,766,586	67,418	0	0	387,872	822,848	0	488,448
73	1,959,072	127,488	76,800	0	716,544	534,528	0	503,712
74	175,520	3,120	0	0	0	123,200	0	49,200
75	815,098	6,394	0	0	184,032	489,024	0	135,648
76	580,992	38,805	0	0	53,040	237,093	19,493	232,560
77	531,836	26,536	0	0	0	290,160	0	215,140
78	310,400	34,560	0	0	50,560	131,200	0	94,080
79	244,896	4,896	51,840	0	0	0	0	188,160
80	9,827,322	503,394	591,805	0	2,665,924	3,825,509	0	2,240,690
81	975,726	54,378	99,522	0	135,432	461,700	0	224,694
82	851,880	16,740	0	0	79,980	496,620	0	258,540
83	888,197	62,357	0	0	83,867	496,293	0	245,680
84	1,176,754	113,602	0	0	391,644	346,104	89,424	235,980
85	3,144,577	84,202	146,916	0	1,367,557	846,409	0	699,493
86	1,055,504	4,264	0	0	252,560	541,200	0	257,480
87	1,755,200	20,533	86,000	0	300,667	888,667	0	459,333
88	764,888	11,700	190,125	0	421,688	0	40,219	101,156
89	497,624	25,024	57,800	0	0	144,840	137,360	132,600
90	1,020,637	19,762	463,250	0	438,813	0	0	98,813
91	68,460	1,080	17,820	0	17,220	0	14,400	17,940
92	627,713	3,088	238,688	0	153,188	0	95,594	137,156
93	981,750	19,125	510,000	0	394,188	0	0	58,438
94	1,183,000	14,000	147,000	0	372,750	206,500	157,500	285,250
95	221,181	10,890	0	0	76,043	72,757	0	61,491
96	2,574,384	55,463	203,906	0	913,500	908,063	0	493,453
97	1,290,947	112,556	204,844	0	373,031	269,531	140,156	190,828
98	196,965	6,479	107,919	0	32,041	33,978	4,049	12,500
99	319,480	5,040	83,160	0	80,360	0	67,200	83,720
100	449,616	2,736	196,080	0	50,920	0	0	199,880
101	402,528	9,408	0	0	105,280	225,120	28,000	34,720
102	1,713,525	14,025	261,250	0	504,625	0	617,375	316,250
103	249,200	11,200	0	0	0	95,200	77,000	65,800
104	664,488	12,113	256,594	0	43,031	102,000	141,844	108,906
105	69,992	3,873	0	0	26,005	0	27,112	13,003
	613,025	27,650	326,375	0	0	0	0	259,000
107	1,910,931	45,163	249,880	0	411,839	475,697	0	728,353
108	517,950	17,325	200,250	0	0	254,250	0	46,125
109	260,624	27,664	86,320	0	40,560	69,160	0	36,920
110	575,051	13,104	22,880	0	298,827	23,920	123,067	93,253
111	1,034,587	63,317	0	0	243,231	498,045	92,108	137,886
112	432,055	43,723	0	0	88,453	0	0	299,879

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
Type	Total Volume (BF)	SITKA SPRUCE						
	Adjusted Net	Total Net Volume by Sort (BF)						
	Estimated Harvest	1	2	3	4	5	6	7
113	2,404,791	112,156	185,917	0	186,927	569,875	551,687	798,229
114	848,896	41,216	147,840	0	67,840	67,200	245,760	279,040
115	584,896	17,936	0	0	76,760	259,160	0	231,040
116	3,683,500	181,000	192,500	0	318,750	602,500	1,037,500	1,351,250
117	1,160,640	25,740	0	0	0	169,200	396,000	569,700
118	460,438	22,625	24,063	0	39,844	75,313	129,688	168,906
119	181,737	2,278	30,836	0	0	0	70,561	78,062
120A	254,560	6,160	0	0	0	0	75,200	173,200
120B	128,960	2,860	0	0	0	18,800	44,000	63,300
121	229,104	5,544	0	0	0	0	67,680	155,880
122	1,302,720	12,267	601,067	0	135,547	0	253,307	300,533
123	1,279,261	91,792	85,600	0	0	158,451	154,808	788,611
124a	453,323	16,194	0	0	67,476	0	90,946	278,706
124b	1,097,899	54,272	0	0	0	395,947	0	647,680
124c	917,947	37,893	0	0	0	316,293	0	563,760
124D	127,280	3,080	0	0	0	0	37,600	86,600
125	675,870	51,870	0	0	0	0	40,300	583,700
126	2,009,675	37,409	603,350	0	275,604	96,006	441,960	555,347
127	1,462,288	52,725	0	0	172,188	239,875	527,250	470,250
128	3,335,744	71,959	0	0	1,312,020	950,253	168,562	832,950
129	1,628,826	150,522	0	0	277,472	121,568	384,192	695,072
130	749,184	44,544	0	0	0	145,920	230,400	328,320
134	303,544	29,944	0	0	38,000	72,200	0	163,400
136	1,292,247	118,020	0	0	0	294,196	118,531	761,500
137	379,120	35,280	0	0	111,440	157,360	0	75,040
139	1,635,186	95,461	79,954	0	257,429	368,274	228,354	605,714
140	2,360,908	109,267	490,640	0	912,326	209,517	334,166	304,993
141	405,979	29,621	0	0	71,438	0	304,920	0
142	1,543,810	45,485	0	0	655,517	385,284	0	457,524
143	253,368	22,448	0	0	65,320	0	109,480	56,120
144	552,656	27,456	131,040	0	68,120	0	43,160	282,880
145	5,463,761	178,485	1,220,463	0	1,222,500	160,963	861,863	1,819,488
146	463,037	64,056	0	0	69,412	0	23,502	306,068
147	1,647,917	18,750	276,042	0	500,000	429,167	0	423,958
148	1,603,080	70,080	50,613	0	316,333	231,167	214,620	720,267
150	188,700	22,200	0	0	0	0	0	166,500
151	7,718,554	450,170	881,888	0	1,690,368	1,530,656	822,368	2,343,104
152	1,713,716	55,822	245,570	0	240,778	309,058	197,654	664,835
153	91,481	5,493	0	0	0	23,867	0	62,121
156	182,856	12,996	0	0	0	0	18,620	151,240
157	203,736	5,096	0	0	0	87,880	0	110,760
158	911,908	29,554	82,000	0	249,417	123,000	186,208	241,729
159	602,051	53,091	0	0	0	196,272	0	352,688
160	3,362,118	145,327	0	0	499,516	1,001,258	209,307	1,506,711
161	284,357	19,493	0	0	0	0	0	264,864
162	1,205,188	2,750	334,125	0	165,000	167,063	335,500	200,750
163	453,948	7,448	45,600	0	136,420	0	68,020	196,460
164	227,600	18,100	0	0	14,500	0	160,500	34,500
165	356,280	5,880	174,600	0	83,400	0	37,200	55,200
166	276,691	9,391	0	0	0	147,884	62,111	57,305
167	234,175	16,863	0	0	0	0	0	217,313
168	531,869	19,394	65,113	0	74,014	0	0	373,348
169	1,197,616	24,416	68,320	0	141,120	0	198,800	764,960
170	12,305,263	412,710	1,542,231	0	1,382,939	1,602,568	1,646,012	5,718,803

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
	Total Volume (BF)	SITKA SPRUCE						
	Adjusted Net	Total Net Volume by Sort (BF)						
Type	Estimated Harvest	1	2	3	4	5	6	7
171A	20,662,605	2,554,524	0	0	915,291	2,638,511	1,474,522	13,079,757
172	4,788,719	538,158	0	0	191,467	681,758	341,905	3,035,431
174	1,622,949	159,461	0	0	0	145,687	221,179	1,096,623
175	1,747,858	53,089	0	0	149,269	96,462	143,636	1,305,402
176	883,714	74,708	0	0	0	293,166	0	515,840
177	198,240	23,240	0	0	0	0	0	175,000
179	670,824	76,734	0	0	0	65,520	0	528,570
180	903,053	56,333	0	0	0	265,248	0	581,472
181	174,480	26,880	0	0	0	0	0	147,600
182	474,188	39,320	0	0	0	190,092	0	244,776
183	283,504	18,304	0	0	0	0	0	265,200
184	807,930	33,840	0	0	90,522	0	185,274	498,294
186	561,211	60,667	0	0	0	221,760	0	278,784
188	127,548	13,788	0	0	0	50,400	0	63,360
189	276,822	45,227	0	0	0	0	0	231,595
190	331,656	29,016	0	0	0	0	0	302,640
194	627,440	83,600	0	0	0	97,680	0	446,160
195	490,176	63,936	0	0	0	59,520	0	366,720
196	730,944	28,764	0	0	75,435	138,180	47,940	440,625
197	517,557	27,691	0	0	56,907	46,933	53,387	332,640
199	1,734,622	110,394	0	0	50,127	193,594	140,586	1,239,921
201	101,374	13,014	0	0	0	0	0	88,361
204	1,677,435	85,823	0	0	0	307,411	97,574	1,186,627
205	3,343,811	408,175	510,546	0	849,600	1,010,618	95,564	469,309
206	457,153	60,135	0	0	29,291	143,985	0	223,742
207	465,570	19,274	0	0	0	56,689	0	389,607
209	31,822	4,270	0	0	2,092	8,268	0	17,192
211	1,843,594	127,535	0	0	157,443	1,003,285	0	555,331
212	3,106,246	272,772	45,844	0	383,423	713,187	70,850	1,620,170
213	1,800,126	136,283	191,408	0	144,800	64,255	176,023	1,087,358
214	5,096,448	430,080	130,816	0	1,158,229	1,381,632	68,693	1,926,997
215	1,582,020	116,615	227,609	0	0	0	378,613	859,182
217	145,128	13,713	0	0	44,029	87,386	0	0
218	58,051	5,485	0	0	17,612	34,954	0	0
222	2,536,746	409,182	0	0	0	312,480	65,582	1,749,502
226	128,522	6,947	0	0	0	41,307	0	80,267
227	154,057	9,717	0	0	0	0	0	144,341
229	1,021,734	127,996	271,313	0	350,313	0	0	272,111
232	589,626	76,006	0	0	85,400	31,720	92,720	303,780
233	588,120	3,480	0	0	0	0	180,544	404,096
236	851,760	8,760	130,800	0	66,600	288,600	109,800	247,200
237	1,372,755	111,707	170,229	0	113,062	65,635	54,626	857,496
238	2,019,429	113,000	0	0	710,000	47,857	165,000	983,571
243	4,261,495	280,685	102,579	0	773,518	451,346	37,232	2,616,134
247	399,840	51,744	0	0	0	0	15,680	332,416
250	820,661	37,275	0	0	0	0	0	783,387
251	571,381	79,061	0	0	0	124,213	0	368,107
252	234,432	13,332	0	0	0	43,560	0	177,540
253	86,652	7,272	0	0	0	5,133	0	74,247
254	71,536	6,216	0	0	0	4,400	0	60,920
255	1,834,846	169,622	166,880	0	369,520	545,340	30,992	552,492
256	66,573	4,577	1,584	0	12,416	4,342	575	43,079
257	1,440,880	76,720	0	0	158,480	381,360	98,000	726,320
258	1,328,670	88,095	0	0	41,475	155,400	122,850	920,850

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen								
	Total Volume (BF)	SITKA SPRUCE						
	Adjusted Net	Total Net Volume by Sort (BF)						
Type	Estimated Harvest	1	2	3	4	5	6	7
259	1,192,500	159,000	0	0	0	546,960	38,160	448,380
261	364,800	22,800	0	0	0	111,600	0	230,400
262	1,080,840	91,440	0	0	0	66,000	0	923,400
265	748,440	29,640	133,200	0	66,000	0	429,600	90,000
266	1,318,132	176,397	121,828	0	313,734	186,516	0	519,656
270	997,272	73,112	0	0	70,680	0	0	853,480
272	325,180	27,975	0	0	0	19,536	0	277,669
275	621,718	99,923	0	0	0	27,728	0	494,067
276	132,350	16,910	0	0	0	0	0	115,440
277	1,073,608	95,657	0	0	0	66,800	0	911,150
279	41,376	5,376	0	0	0	0	0	36,000
282	339,483	8,187	0	0	0	0	0	331,296
284	304,769	28,797	0	0	92,461	183,511	0	0
TOTALS	297,601,686	17,145,738	25,430,957	0	56,734,032	62,376,753	20,478,143	115,436,063

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen										
Includes Only 20% of Remaining 1 Sort Volume								Gross	Harvest	Gross
Total Gross Value by Sort (BF)								Value	Volume	Value
Type	1	2	3	4	5	6	7	/MBF	/Acre	/Acre
1	\$17,641	\$201,240	-	\$139,213	\$0	\$0	\$194,575	\$577	11,130	\$6,426
3	\$14,756	\$271,808	-	\$59,603	\$77,872	\$0	\$131,853	\$606	14,787	\$8,966
5	\$6,655	\$85,925	-	\$30,467	\$189,961	\$0	\$32,994	\$599	22,226	\$13,308
6	\$2,493	\$0	-	\$160,676	\$54,497	\$0	\$52,103	\$611	29,413	\$17,985
7	\$3,229	\$0	-	\$0	\$53,352	\$0	\$48,880	\$507	16,016	\$8,112
8	\$579	\$13,650	-	\$23,494	\$0	\$0	\$12,000	\$634	26,163	\$16,574
9	\$259	\$0	-	\$0	\$0	\$0	\$38,080	\$492	9,736	\$4,792
10	\$958	\$0	-	\$45,019	\$67,463	\$0	\$0	\$619	26,162	\$16,206
11	\$9,207	\$639,936	-	\$159,390	\$0	\$0	\$125,730	\$697	60,930	\$42,467
12	\$5,328	\$0	-	\$271,432	\$0	\$92,833	\$135,420	\$603	22,620	\$13,649
13	\$32,376	\$107,229	-	\$743,833	\$191,105	\$82,184	\$564,128	\$576	15,714	\$9,057
14	\$1,351	\$165,988	-	\$90,086	\$0	\$0	\$52,528	\$688	28,140	\$19,372
15	\$684	\$0	-	\$32,156	\$48,188	\$0	\$0	\$619	26,162	\$16,206
16	\$11,371	\$477,425	-	\$475,424	\$0	\$193,571	\$544,401	\$622	24,233	\$15,064
17	\$35,894	\$1,190,232	-	\$2,788,677	\$686,230	\$322,614	\$2,346,776	\$612	57,083	\$34,931
18	\$3,461	\$425,346	-	\$230,844	\$0	\$0	\$134,603	\$688	28,140	\$19,372
19	\$1,591	\$235,552	-	\$0	\$40,392	\$0	\$77,520	\$673	31,024	\$20,886
20	\$7,055	\$348,300	-	\$269,019	\$97,556	\$57,647	\$102,797	\$667	30,781	\$20,520
21	\$3,377	\$0	-	\$41,944	\$109,536	\$62,972	\$84,560	\$569	18,964	\$10,800
22	\$29,456	\$69,471	-	\$629,756	\$741,952	\$39,135	\$616,557	\$573	25,086	\$14,367
23	\$3,758	\$63,936	-	\$157,248	\$141,264	\$0	\$8,100	\$644	48,438	\$31,192
24	\$1,352	\$31,850	-	\$54,819	\$0	\$0	\$28,000	\$634	26,163	\$16,574
25	\$9,920	\$164,560	-	\$304,640	\$34,170	\$0	\$123,250	\$630	11,888	\$7,489
26	\$1,153	\$103,664	-	\$62,062	\$22,692	\$0	\$90,210	\$630	14,328	\$9,025
27	\$5,507	\$0	-	\$0	\$0	\$0	\$243,375	\$475	15,863	\$7,542
28	\$410	\$0	-	\$0	\$0	\$0	\$40,200	\$488	13,856	\$6,768
29	\$26,772	\$1,021,725	-	\$1,204,482	\$966,150	\$348,502	\$511,219	\$643	37,106	\$23,853
30	\$3,062	\$101,536	-	\$237,897	\$58,541	\$27,522	\$200,199	\$612	57,083	\$34,931
31	\$35,453	\$636,109	-	\$2,949,167	\$2,065,246	\$29,884	\$668,895	\$634	28,130	\$17,835
32	\$1,920	\$0	-	\$0	\$0	\$0	\$59,200	\$466	6,560	\$3,056
33	\$4,082	\$433,944	-	\$0	\$114,534	\$0	\$101,115	\$679	45,846	\$31,127
34	\$2,218	\$0	-	\$173,460	\$188,496	\$0	\$39,060	\$616	31,184	\$19,202
35	\$4,277	\$454,608	-	\$0	\$119,988	\$0	\$105,930	\$679	45,846	\$31,127
36	\$34,155	\$198,893	-	\$185,982	\$123,561	\$101,954	\$279,560	\$555	16,979	\$9,430
37	\$11,993	\$38,304	-	\$289,408	\$193,344	\$34,580	\$162,260	\$588	21,776	\$12,805
38	\$1,455	\$0	-	\$57,050	\$0	\$52,975	\$60,000	\$586	11,708	\$6,859
39	\$1,737	\$216,339	-	\$203,958	\$147,101	\$0	\$173,712	\$637	21,199	\$13,506
40	\$1,960	\$0	-	\$103,194	\$38,556	\$0	\$21,600	\$617	26,795	\$16,531
41	\$223	\$0	-	\$420,546	\$50,220	\$0	\$146,010	\$631	48,899	\$30,850
42	\$415	\$0	-	\$236,477	\$168,998	\$0	\$52,704	\$630	45,479	\$28,662
43	\$130	\$0	-	\$73,899	\$52,812	\$0	\$16,470	\$630	45,479	\$28,662
44	\$13,783	\$0	-	\$106,336	\$212,302	\$43,350	\$151,909	\$545	12,255	\$6,679
45	\$562	\$0	-	\$56,448	\$92,016	\$49,140	\$21,240	\$617	19,768	\$12,189
46	\$2,575	\$0	-	\$46,947	\$45,024	\$0	\$10,318	\$583	17,991	\$10,486
47	\$2,575	\$0	-	\$46,947	\$45,024	\$0	\$10,318	\$583	17,991	\$10,486
48	\$41,686	\$100,096	-	\$275,808	\$1,085,980	\$0	\$228,869	\$565	22,535	\$12,739
49	\$524	\$0	-	\$27,132	\$238,488	\$0	\$20,900	\$596	25,344	\$15,108
50	\$2,120	\$0	-	\$130,340	\$149,568	\$0	\$44,080	\$606	28,304	\$17,164
51	\$1,976	\$0	-	\$0	\$25,488	\$0	\$20,880	\$496	10,824	\$5,372
54	\$30,427	\$290,845	-	\$1,024,800	\$635,200	\$0	\$543,111	\$605	20,876	\$12,622
55	\$691	\$0	-	\$0	\$177,408	\$0	\$90,880	\$558	15,064	\$8,406
56	\$7,301	\$0	-	\$100,800	\$108,432	\$0	\$309,960	\$530	18,395	\$9,750
57	\$25,074	\$0	-	\$470,102	\$382,356	\$0	\$381,131	\$562	52,052	\$29,271
58	\$2,855	\$0	-	\$0	\$36,816	\$0	\$30,160	\$496	10,824	\$5,372

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen										
Includes Only 20% of Remaining 1 Sort Volume								Gross	Harvest	Gross
Total Gross Value by Sort (BF)								Value	Volume	Value
Type	1	2	3	4	5	6	7	/MBF	/Acre	/Acre
59	\$930	\$0	-	\$0	\$142,800	\$0	\$154,000	\$539	22,088	\$11,909
60	\$5,461	\$0	-	\$52,808	\$123,492	\$0	\$91,020	\$546	12,188	\$6,653
61	\$562	\$0	-	\$56,448	\$92,016	\$49,140	\$21,240	\$617	19,768	\$12,189
62	\$798	\$0	-	\$154,300	\$211,442	\$0	\$120,042	\$595	31,471	\$18,715
63	\$34,194	\$302,416	-	\$999,908	\$909,708	\$25,051	\$697,000	\$596	17,363	\$10,342
64	\$10,757	\$0	-	\$254,478	\$673,296	\$0	\$290,915	\$575	25,774	\$14,813
65	\$6,264	\$0	-	\$181,440	\$223,344	\$0	\$172,440	\$573	18,853	\$10,805
66	\$15,468	\$241,016	-	\$276,031	\$235,188	\$38,493	\$120,085	\$622	31,704	\$19,708
67	\$3,671	\$0	-	\$58,520	\$94,392	\$0	\$15,200	\$581	15,568	\$9,041
68	\$5,040	\$0	-	\$39,900	\$165,240	\$0	\$67,200	\$554	16,680	\$9,246
69	\$20,413	\$0	-	\$516,858	\$588,190	\$0	\$319,464	\$579	28,663	\$16,608
70	\$2,864	\$0	-	\$42,196	\$64,416	\$0	\$22,220	\$570	21,016	\$11,972
71	\$2,481	\$0	-	\$56,818	\$243,968	\$0	\$71,119	\$579	28,111	\$16,278
72	\$10,113	\$0	-	\$271,510	\$493,709	\$0	\$244,224	\$577	19,202	\$11,082
73	\$19,123	\$61,440	-	\$501,581	\$320,717	\$0	\$251,856	\$589	20,407	\$12,028
74	\$468	\$0	-	\$0	\$73,920	\$0	\$24,600	\$564	17,552	\$9,899
75	\$959	\$0	-	\$128,822	\$293,414	\$0	\$67,824	\$602	50,944	\$30,689
76	\$5,821	\$0	-	\$37,128	\$142,256	\$12,671	\$116,280	\$541	17,088	\$9,240
77	\$3,980	\$0	-	\$0	\$174,096	\$0	\$107,570	\$537	17,156	\$9,214
78	\$5,184	\$0	-	\$35,392	\$78,720	\$0	\$47,040	\$536	19,400	\$10,396
79	\$734	\$41,472	-	\$0	\$0	\$0	\$94,080	\$557	20,408	\$11,357
80	\$75,509	\$473,444	-	\$1,866,147	\$2,295,305	\$0	\$1,120,345	\$593	25,659	\$15,224
81	\$8,157	\$79,618	-	\$94,802	\$277,020	\$0	\$112,347	\$586	25,677	\$15,051
82	\$2,511	\$0	-	\$55,986	\$297,972	\$0	\$129,270	\$570	27,480	\$15,669
83	\$9,354	\$0	-	\$58,707	\$297,776	\$0	\$122,840	\$550	12,003	\$6,604
84	\$17,040	\$0	-	\$274,151	\$207,662	\$58,126	\$117,990	\$574	21,792	\$12,499
85	\$12,630	\$117,532	-	\$957,290	\$507,845	\$0	\$349,747	\$619	28,849	\$17,844
86	\$640	\$0	-	\$176,792	\$324,720	\$0	\$128,740	\$598	25,744	\$15,388
87	\$3,080	\$68,800	-	\$210,467	\$533,200	\$0	\$229,667	\$595	35,104	\$20,904
88	\$1,755	\$152,100	-	\$295,181	\$0	\$26,142	\$50,578	\$687	19,613	\$13,481
89	\$3,754	\$46,240	-	\$0	\$86,904	\$89,284	\$66,300	\$588	29,272	\$17,205
90	\$2,964	\$370,600	-	\$307,169	\$0	\$0	\$49,406	\$715	60,037	\$42,949
91	\$162	\$14,256	-	\$12,054	\$0	\$9,360	\$8,970	\$654	22,820	\$14,934
92	\$463	\$190,950	-	\$107,231	\$0	\$62,136	\$68,578	\$684	33,038	\$22,598
93	\$2,869	\$408,000	-	\$275,931	\$0	\$0	\$29,219	\$729	28,875	\$21,059
94	\$2,100	\$117,600	-	\$260,925	\$123,900	\$102,375	\$142,625	\$634	42,250	\$26,769
95	\$1,634	\$0	-	\$53,230	\$43,654	\$0	\$30,746	\$584	22,118	\$12,926
96	\$8,319	\$163,125	-	\$639,450	\$544,838	\$0	\$246,727	\$622	29,591	\$18,419
97	\$16,883	\$163,875	-	\$261,122	\$161,719	\$91,102	\$95,414	\$612	18,709	\$11,451
98	\$972	\$86,335	-	\$22,429	\$20,387	\$2,632	\$6,250	\$706	28,138	\$19,858
99	\$756	\$66,528	-	\$56,252	\$0	\$43,680	\$41,860	\$654	22,820	\$14,934
100	\$410	\$156,864	-	\$35,644	\$0	\$0	\$99,940	\$651	23,664	\$15,414
101	\$1,411	\$0	-	\$73,696	\$135,072	\$18,200	\$17,360	\$610	14,376	\$8,776
102	\$2,104	\$209,000	-	\$353,238	\$0	\$401,294	\$158,125	\$656	38,944	\$25,540
103	\$1,680	\$0	-	\$0	\$57,120	\$50,050	\$32,900	\$569	7,120	\$4,050
104	\$1,817	\$205,275	-	\$30,122	\$61,200	\$92,198	\$54,453	\$670	39,088	\$26,180
105	\$581	\$0	-	\$18,204	\$0	\$17,623	\$6,501	\$613	6,363	\$3,901
	\$4,148	\$261,100	-	\$0	\$0	\$0	\$129,500	\$644	21,894	\$14,098
107	\$6,775	\$199,904	-	\$288,287	\$285,418	\$0	\$364,176	\$599	22,482	\$13,465
108	\$2,599	\$160,200	-	\$0	\$152,550	\$0	\$23,063	\$653	28,775	\$18,801
109	\$4,150	\$69,056	-	\$28,392	\$41,496	\$0	\$18,460	\$620	10,024	\$6,214
110	\$1,966	\$18,304	-	\$209,179	\$14,352	\$79,993	\$46,627	\$644	22,117	\$14,247
111	\$9,498	\$0	-	\$170,262	\$298,827	\$59,870	\$68,943	\$587	22,012	\$12,923
112	\$6,558	\$0	-	\$61,917	\$0	\$0	\$149,939	\$506	9,393	\$4,748

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen										
Includes Only 20% of Remaining 1 Sort Volume								Gross	Harvest	Gross
Total Gross Value by Sort (BF)								Value	Volume	Value
Type	1	2	3	4	5	6	7	/MBF	/Acre	/Acre
113	\$16,823	\$148,734	-	\$130,849	\$341,925	\$358,597	\$399,115	\$581	24,792	\$14,392
114	\$6,182	\$118,272	-	\$47,488	\$40,320	\$159,744	\$139,520	\$603	17,685	\$10,657
115	\$2,690	\$0	-	\$53,732	\$155,496	\$0	\$115,520	\$560	15,392	\$8,617
116	\$27,150	\$154,000	-	\$223,125	\$361,500	\$674,375	\$675,625	\$574	18,418	\$10,579
117	\$3,861	\$0	-	\$0	\$101,520	\$257,400	\$284,850	\$558	25,792	\$14,392
118	\$3,394	\$19,250	-	\$27,891	\$45,188	\$84,297	\$84,453	\$574	18,418	\$10,579
119	\$342	\$24,669	-	\$0	\$0	\$45,865	\$39,031	\$605	18,174	\$10,991
120A	\$924	\$0	-	\$0	\$0	\$48,880	\$86,600	\$536	25,456	\$13,640
120B	\$429	\$0	-	\$0	\$11,280	\$28,600	\$31,650	\$558	25,792	\$14,392
121	\$832	\$0	-	\$0	\$0	\$43,992	\$77,940	\$536	25,456	\$13,640
122	\$1,840	\$480,853	-	\$94,883	\$0	\$164,649	\$150,267	\$685	28,320	\$19,402
123	\$13,769	\$68,480	-	\$0	\$95,070	\$100,625	\$394,305	\$525	13,188	\$6,930
124a	\$2,429	\$0	-	\$47,233	\$0	\$59,115	\$139,353	\$547	18,133	\$9,925
124b	\$8,141	\$0	-	\$0	\$237,568	\$0	\$323,840	\$519	17,155	\$8,899
124c	\$5,684	\$0	-	\$0	\$189,776	\$0	\$281,880	\$520	15,827	\$8,230
124D	\$462	\$0	-	\$0	\$0	\$24,440	\$43,300	\$536	25,456	\$13,640
125	\$7,781	\$0	-	\$0	\$0	\$26,195	\$291,850	\$482	10,398	\$5,013
126	\$5,611	\$482,680	-	\$192,923	\$57,604	\$287,274	\$277,673	\$649	26,443	\$17,155
127	\$7,909	\$0	-	\$120,531	\$143,925	\$342,713	\$235,125	\$581	25,654	\$14,916
128	\$10,794	\$0	-	\$918,414	\$570,152	\$109,565	\$416,475	\$607	26,474	\$16,075
129	\$22,578	\$0	-	\$194,230	\$72,941	\$249,725	\$347,536	\$545	14,042	\$7,647
130	\$6,682	\$0	-	\$0	\$87,552	\$149,760	\$164,160	\$545	10,405	\$5,669
134	\$4,492	\$0	-	\$26,600	\$43,320	\$0	\$81,700	\$514	7,988	\$4,108
136	\$17,703	\$0	-	\$0	\$176,518	\$77,045	\$380,750	\$505	11,855	\$5,982
137	\$5,292	\$0	-	\$78,008	\$94,416	\$0	\$37,520	\$568	13,540	\$7,687
139	\$14,319	\$63,963	-	\$180,200	\$220,965	\$148,430	\$302,857	\$569	15,426	\$8,781
140	\$16,390	\$392,512	-	\$638,628	\$125,710	\$217,208	\$152,496	\$654	20,893	\$13,654
141	\$4,443	\$0	-	\$50,007	\$0	\$198,198	\$0	\$622	25,374	\$15,791
142	\$6,823	\$0	-	\$458,862	\$231,170	\$0	\$228,762	\$600	27,084	\$16,239
143	\$3,367	\$0	-	\$45,724	\$0	\$71,162	\$28,060	\$585	11,016	\$6,448
144	\$4,118	\$104,832	-	\$47,684	\$0	\$28,054	\$141,440	\$590	21,256	\$12,543
145	\$26,773	\$976,370	-	\$855,750	\$96,578	\$560,211	\$909,744	\$627	33,520	\$21,015
146	\$9,608	\$0	-	\$48,588	\$0	\$15,276	\$153,034	\$489	6,809	\$3,331
147	\$2,813	\$220,833	-	\$350,000	\$257,500	\$0	\$211,979	\$633	32,958	\$20,863
148	\$10,512	\$40,491	-	\$221,433	\$138,700	\$139,503	\$360,133	\$568	21,960	\$12,476
150	\$3,330	\$0	-	\$0	\$0	\$0	\$83,250	\$459	7,548	\$3,463
151	\$67,525	\$705,510	-	\$1,183,258	\$918,394	\$534,539	\$1,171,552	\$593	22,972	\$13,633
152	\$8,373	\$196,456	-	\$168,545	\$185,435	\$128,475	\$332,417	\$595	25,965	\$15,450
153	\$824	\$0	-	\$0	\$14,320	\$0	\$31,060	\$505	7,037	\$3,554
156	\$1,949	\$0	-	\$0	\$0	\$12,103	\$75,620	\$490	9,624	\$4,720
157	\$764	\$0	-	\$0	\$52,728	\$0	\$55,380	\$534	15,672	\$8,375
158	\$4,433	\$65,600	-	\$174,592	\$73,800	\$121,035	\$120,865	\$614	22,242	\$13,666
159	\$7,964	\$0	-	\$0	\$117,763	\$0	\$176,344	\$502	12,543	\$6,293
160	\$21,799	\$0	-	\$349,661	\$600,755	\$136,049	\$753,356	\$554	20,132	\$11,147
161	\$2,924	\$0	-	\$0	\$0	\$0	\$132,432	\$476	23,696	\$11,280
162	\$413	\$267,300	-	\$115,500	\$100,238	\$218,075	\$100,375	\$665	36,521	\$24,300
163	\$1,117	\$36,480	-	\$95,494	\$0	\$44,213	\$98,230	\$607	23,892	\$14,502
164	\$2,715	\$0	-	\$10,150	\$0	\$104,325	\$17,250	\$591	9,104	\$5,378
165	\$882	\$139,680	-	\$58,380	\$0	\$24,180	\$27,600	\$704	23,752	\$16,715
166	\$1,409	\$0	-	\$0	\$88,730	\$40,372	\$28,653	\$575	12,577	\$7,235
167	\$2,529	\$0	-	\$0	\$0	\$0	\$108,656	\$475	12,325	\$5,852
168	\$2,909	\$52,091	-	\$51,810	\$0	\$0	\$186,674	\$552	12,369	\$6,825
169	\$3,662	\$54,656	-	\$98,784	\$0	\$129,220	\$382,480	\$558	12,221	\$6,825
170	\$61,906	\$1,233,785	-	\$968,057	\$961,541	\$1,069,908	\$2,859,402	\$581	15,420	\$8,966

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen										
Includes Only 20% of Remaining 1 Sort Volume								Gross	Harvest	Gross
Type	Total Gross Value by Sort (BF)							Value	Volume	Value
	1	2	3	4	5	6	7	/MBF	/Acre	/Acre
171A	\$383,179	\$0	-	\$640,704	\$1,583,107	\$958,439	\$6,539,879	\$489	7,547	\$3,691
172	\$80,724	\$0	-	\$134,027	\$409,055	\$222,238	\$1,517,716	\$494	6,670	\$3,292
174	\$23,919	\$0	-	\$0	\$87,412	\$143,766	\$548,312	\$495	10,892	\$5,392
175	\$7,963	\$0	-	\$104,488	\$57,877	\$93,364	\$652,701	\$524	14,565	\$7,637
176	\$11,206	\$0	-	\$0	\$175,900	\$0	\$257,920	\$504	14,487	\$7,296
177	\$3,486	\$0	-	\$0	\$0	\$0	\$87,500	\$459	7,930	\$3,639
179	\$11,510	\$0	-	\$0	\$39,312	\$0	\$264,285	\$470	10,648	\$5,002
180	\$8,450	\$0	-	\$0	\$159,149	\$0	\$290,736	\$508	18,814	\$9,549
181	\$4,032	\$0	-	\$0	\$0	\$0	\$73,800	\$446	5,816	\$2,594
182	\$5,898	\$0	-	\$0	\$114,055	\$0	\$122,388	\$511	22,580	\$11,540
183	\$2,746	\$0	-	\$0	\$0	\$0	\$132,600	\$477	10,904	\$5,206
184	\$5,076	\$0	-	\$63,365	\$0	\$120,428	\$249,147	\$542	22,443	\$12,167
186	\$9,100	\$0	-	\$0	\$133,056	\$0	\$139,392	\$502	12,755	\$6,399
188	\$2,068	\$0	-	\$0	\$30,240	\$0	\$31,680	\$502	12,755	\$6,399
189	\$6,784	\$0	-	\$0	\$0	\$0	\$115,798	\$443	4,259	\$1,886
190	\$4,352	\$0	-	\$0	\$0	\$0	\$151,320	\$469	8,504	\$3,992
194	\$12,540	\$0	-	\$0	\$58,608	\$0	\$223,080	\$469	7,130	\$3,344
195	\$9,590	\$0	-	\$0	\$35,712	\$0	\$183,360	\$466	7,659	\$3,573
196	\$4,315	\$0	-	\$52,805	\$82,908	\$31,161	\$220,313	\$536	24,365	\$13,050
197	\$4,154	\$0	-	\$39,835	\$28,160	\$34,701	\$166,320	\$528	11,763	\$6,208
199	\$16,559	\$0	-	\$35,089	\$116,156	\$91,381	\$619,961	\$507	14,455	\$7,326
201	\$1,952	\$0	-	\$0	\$0	\$0	\$44,180	\$455	4,608	\$2,097
204	\$12,873	\$0	-	\$0	\$184,446	\$63,423	\$593,314	\$509	14,586	\$7,427
205	\$61,226	\$408,436	-	\$594,720	\$606,371	\$62,116	\$234,655	\$588	18,577	\$10,931
206	\$9,020	\$0	-	\$20,504	\$86,391	\$0	\$111,871	\$498	10,885	\$5,423
207	\$2,891	\$0	-	\$0	\$34,013	\$0	\$194,804	\$498	10,121	\$5,037
209	\$641	\$0	-	\$1,465	\$4,961	\$0	\$8,596	\$492	10,607	\$5,221
211	\$19,130	\$0	-	\$110,210	\$601,971	\$0	\$277,666	\$547	18,812	\$10,296
212	\$40,916	\$36,675	-	\$268,396	\$427,912	\$46,052	\$810,085	\$525	14,314	\$7,512
213	\$20,442	\$153,126	-	\$101,360	\$38,553	\$114,415	\$543,679	\$540	9,945	\$5,368
214	\$64,512	\$104,653	-	\$810,760	\$828,979	\$44,651	\$963,499	\$553	22,752	\$12,576
215	\$17,492	\$182,087	-	\$0	\$0	\$246,099	\$429,591	\$553	12,758	\$7,059
217	\$2,057	\$0	-	\$30,820	\$52,432	\$0	\$0	\$588	14,513	\$8,531
218	\$823	\$0	-	\$12,328	\$20,973	\$0	\$0	\$588	14,513	\$8,531
222	\$61,377	\$0	-	\$0	\$187,488	\$42,628	\$874,751	\$460	5,845	\$2,687
226	\$1,042	\$0	-	\$0	\$24,784	\$0	\$40,134	\$513	12,852	\$6,596
227	\$1,457	\$0	-	\$0	\$0	\$0	\$72,170	\$478	10,270	\$4,909
229	\$19,199	\$217,051	-	\$245,219	\$0	\$0	\$136,056	\$604	15,025	\$9,081
232	\$11,401	\$0	-	\$59,780	\$19,032	\$60,268	\$151,890	\$513	9,666	\$4,957
233	\$522	\$0	-	\$0	\$0	\$117,354	\$202,048	\$544	10,502	\$5,713
236	\$1,314	\$104,640	-	\$46,620	\$173,160	\$71,370	\$123,600	\$611	28,392	\$17,357
237	\$16,756	\$136,183	-	\$79,144	\$39,381	\$35,507	\$428,748	\$536	10,020	\$5,370
238	\$16,950	\$0	-	\$497,000	\$28,714	\$107,250	\$491,786	\$565	16,155	\$9,134
243	\$42,103	\$82,063	-	\$541,463	\$270,808	\$24,201	\$1,308,067	\$532	16,454	\$8,759
247	\$7,762	\$0	-	\$0	\$0	\$10,192	\$166,208	\$461	4,760	\$2,192
250	\$5,591	\$0	-	\$0	\$0	\$0	\$391,693	\$484	7,075	\$3,425
251	\$11,859	\$0	-	\$0	\$74,528	\$0	\$184,053	\$473	8,403	\$3,977
252	\$2,000	\$0	-	\$0	\$26,136	\$0	\$88,770	\$499	7,104	\$3,543
253	\$1,091	\$0	-	\$0	\$3,080	\$0	\$37,123	\$477	12,379	\$5,899
254	\$932	\$0	-	\$0	\$2,640	\$0	\$30,460	\$476	11,923	\$5,672
255	\$25,443	\$133,504	-	\$258,664	\$327,204	\$20,145	\$276,246	\$567	12,314	\$6,988
256	\$687	\$1,267	-	\$8,691	\$2,605	\$374	\$21,540	\$528	16,643	\$8,791
257	\$11,508	\$0	-	\$110,936	\$228,816	\$63,700	\$363,160	\$540	12,865	\$6,948
258	\$13,214	\$0	-	\$29,033	\$93,240	\$79,853	\$460,425	\$509	12,654	\$6,436

SHUYAK STAND FEASIBILITY - Harvest Plan After First Screen										
Includes Only 20% of Remaining 1 Sort Volume								Gross	Harvest	Gross
Total Gross Value by Sort (BF)								Value	Volume	Value
Type	1	2	3	4	5	6	7	/MBF	/Acre	/Acre
259	\$23,850	\$0	-	\$0	\$328,176	\$24,804	\$224,190	\$504	11,250	\$5,670
261	\$3,420	\$0	-	\$0	\$66,960	\$0	\$115,200	\$509	12,160	\$6,186
262	\$13,716	\$0	-	\$0	\$39,600	\$0	\$461,700	\$476	12,009	\$5,722
265	\$4,446	\$106,560	-	\$46,200	\$0	\$279,240	\$45,000	\$643	24,948	\$16,048
266	\$26,460	\$97,462	-	\$219,614	\$111,909	\$0	\$259,828	\$543	19,103	\$10,366
270	\$10,967	\$0	-	\$49,476	\$0	\$0	\$426,740	\$489	13,122	\$6,410
272	\$4,196	\$0	-	\$0	\$11,722	\$0	\$138,835	\$476	10,490	\$4,992
275	\$14,988	\$0	-	\$0	\$16,637	\$0	\$247,034	\$448	5,921	\$2,654
276	\$2,537	\$0	-	\$0	\$0	\$0	\$57,720	\$455	1,697	\$773
277	\$14,349	\$0	-	\$0	\$40,080	\$0	\$455,575	\$475	10,128	\$4,811
279	\$806	\$0	-	\$0	\$0	\$0	\$18,000	\$455	3,448	\$1,567
282	\$1,228	\$0	-	\$0	\$0	\$0	\$165,648	\$492	12,124	\$5,960
284	\$4,320	\$0	-	\$64,723	\$110,106	\$0	\$0	\$588	14,513	\$8,531
TOTALS	\$2,571,861	\$20,344,766	\$0	\$39,713,822	\$37,426,052	\$13,310,793	\$57,718,031	\$575	16,646	\$9,570

SHUYAK STAND FEASIBILITY - First Screen Deletions from Harvest Plan									
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)		
			DBH	Height	Basal	# Of	Net	Gross	Adjusted Net
2	58	4	18.1	46	338	237	930,948	1,324,771	1,183,531
4	17	*	18.1	46	338	237	272,864	388,295	346,897
52	7	1	12.1	33	140	231	61,040	67,060	61,040
53	10	1	13.4	45	270	328	204,660	212,760	204,660
131	12	1	10.0	19	120	232	45,600	50,400	45,600
132	10	1	11.6	29	200	357	102,000	106,800	102,000
133	6	*	11.6	29	200	357	61,200	64,080	61,200
135	126	6	12.7	26	97	153	441,840	540,960	495,600
138	19	1	11.1	35	280	500	332,880	344,280	332,880
149	34	2	23.3	57	200	77	633,080	670,480	633,080
154	41	2	9.9	29	201	410	533,105	553,212	533,105
155	6	1	10.5	29	201	360	68,961	71,677	68,961
171B	184	11	12.3	27	207	308	1,465,309	1,565,670	1,465,309
173	159	7	13.5	32	154	189	1,184,777	1,334,692	1,227,480
178	28	2	16.8	39	220	184	305,760	328,160	305,760
185	48	3	16.5	41	200	221	623,360	679,040	650,880
187	21	1	18.8	49	270	181	277,830	438,858	334,530
191	30	1	10.0	21	270	511	338,580	354,780	338,580
192	23	1	9.8	29	240	481	357,880	374,440	357,880
193	80	2	14.6	43	220	219	1,145,600	1,192,000	1,145,600
198	40	3	13.2	32	222	297	431,146	496,706	474,112
200	31	2	13.2	29	208	265	285,912	318,206	298,829
202	5	*	13.2	29	208	265	46,115	51,324	48,198
203	4	*	13.2	29	208	265	36,892	41,059	38,559
208	6	*	12.3	27	207	308	47,782	51,055	47,782
216	10	1	9.5	18	168	344	63,560	66,920	63,560
219	106	5	15.1	37	161	166	722,625	985,290	894,005
220	351	14	14.8	39	200	233	3,731,631	4,093,663	3,785,786
221	107	5	13.8	28	56	71	202,127	215,206	202,127
223	8	1	13.5	25	204	253	37,264	47,328	44,880
224	65	4	13.6	32	210	249	515,515	560,560	515,515
225	11	*	16.3	43	176	156	122,785	135,971	127,345
228	148	9	16.3	43	176	156	1,611,667	1,787,425	1,673,016
230	15	*	11.0	18	60	117	23,850	26,700	23,850
231	11	1	11.0	18	60	117	17,490	19,580	17,490
234	14	1	12.5	31	120	169	68,320	71,680	68,320
235	23	2	10.9	23	150	261	122,590	133,860	127,650
239	42	2	10.2	19	95	187	124,320	135,030	124,320
240	70	4	12.4	27	240	338	619,500	692,300	651,000
241	11	1	13.0	26	196	240	77,308	80,696	77,308
242	53	3	13.0	27	240	312	398,560	445,200	424,707
244	19	2	10.9	17	45	73	20,045	21,565	20,045
245	135	9	12.5	26	222	339	1,062,000	1,122,600	1,062,000

SHUYAK STAND FEASIBILITY - First Screen Deletions from Harvest Plan									
			Average		Per Acre		Total Volume (BF)		
			Merch.		Basal	# Of			
Type	Acres	Plots	DBH	Height	Area	Stems	Net	Gross	Adjusted Net
246	159	8	11.9	22	175	284	814,875	889,605	814,875
248	43	3	11.8	33	200	309	500,520	526,893	500,520
249	4	*	11.8	33	200	309	46,560	49,013	46,560
260	7	1	12.4	31	329	458	101,531	107,117	101,531
263	39	3	11.4	26	280	486	427,960	477,880	437,320
264	577	30	12.0	29	180	281	4,423,667	4,905,270	4,590,612
267	23	1	10.6	20	168	290	123,685	131,415	123,685
268	13	1	12.9	21	280	365	61,360	94,120	91,000
269	39	2	12.1	27	200	308	354,120	373,620	354,120
271	168	8	11.8	31	275	418	2,341,080	2,500,680	2,341,080
273	58	2	11.4	28	194	335	449,536	516,402	494,651
274	26	2	10.2	22	153	306	169,736	179,126	169,736
278	41	2	11.3	24	272	469	411,230	450,262	411,230
280	63	2	12.0	22	90	126	148,680	156,870	148,680
281	6	1	13.4	31	196	218	38,808	51,744	47,208
283	12	1	12.3	31	60	99	42,480	44,160	42,480
TOTALS	3,482	184	12.8	30	185	259	30,232,104	33,716,516	31,420,263

SHUYAK STAND FEASIBILITY - First Screen Deletions from Harvest Plan

SITKA SPRUCE

Type	Total Volume (BF)			Total Net Volume by Sort (BF)						
	Net	Gross	Adjusted Net	1	2	3	4	5	6	7
2	930,948	1,324,771	1,183,531	735,067	0	0	161,859	0	0	286,604
4	272,864	388,295	346,897	215,451	0	0	47,441	0	0	84,005
52	61,040	67,060	61,040	54,460	0	0	0	0	0	6,580
53	204,660	212,760	204,660	126,360	0	0	0	0	0	78,300
131	45,600	50,400	45,600	45,600	0	0	0	0	0	0
132	102,000	106,800	102,000	53,600	0	0	0	0	0	48,400
133	61,200	64,080	61,200	32,160	0	0	0	0	0	29,040
135	441,840	540,960	495,600	381,780	0	0	0	0	0	113,820
138	332,880	344,280	332,880	215,080	0	0	0	0	0	117,800
149	633,080	670,480	633,080	345,440	0	0	96,560	110,840	0	80,240
154	533,105	553,212	533,105	361,418	0	0	0	0	0	171,687
155	68,961	71,677	68,961	39,083	0	0	0	0	0	29,878
171B	1,465,309	1,565,670	1,465,309	917,993	58,880	0	32,116	0	41,484	414,836
173	1,184,777	1,334,692	1,227,480	738,669	0	0	79,046	0	0	409,766
178	305,760	328,160	305,760	216,160	0	0	0	0	0	89,600
185	623,360	679,040	650,880	435,840	0	0	0	105,600	0	109,440
187	277,830	438,858	334,530	146,286	0	0	0	127,008	0	61,236
191	338,580	354,780	338,580	338,580	0	0	0	0	0	0
192	357,880	374,440	357,880	190,440	0	0	0	0	0	167,440
193	1,145,600	1,192,000	1,145,600	587,200	0	0	0	128,000	0	430,400
198	431,146	496,706	474,112	261,502	0	0	0	0	0	212,610
200	285,912	318,206	298,829	226,490	0	0	0	0	0	72,339
202	46,115	51,324	48,198	36,531	0	0	0	0	0	11,668
203	36,892	41,059	38,559	29,225	0	0	0	0	0	9,334
208	47,782	51,055	47,782	29,935	1,920	0	1,047	0	1,353	13,527
216	63,560	66,920	63,560	63,560	0	0	0	0	0	0
219	722,625	985,290	894,005	873,981	0	0	0	0	0	20,024
220	3,731,631	4,093,663	3,785,786	2,001,703	0	0	0	238,680	0	1,545,403
221	202,127	215,206	202,127	129,005	0	0	0	0	0	73,123
223	37,264	47,328	44,880	27,200	0	0	0	0	0	17,680
224	515,515	560,560	515,515	257,985	48,230	0	0	0	43,680	165,620
225	122,785	135,971	127,345	72,299	0	0	3,656	6,860	0	44,530
228	1,611,667	1,787,425	1,673,016	964,458	0	0	49,190	92,301	0	567,068
230	23,850	26,700	23,850	23,850	0	0	0	0	0	0
231	17,490	19,580	17,490	17,490	0	0	0	0	0	0
234	68,320	71,680	68,320	42,840	0	0	0	0	0	25,480
235	122,590	133,860	127,650	106,950	0	0	0	0	0	20,700
239	124,320	135,030	124,320	114,450	0	0	0	0	0	9,870
240	619,500	692,300	651,000	410,200	0	0	0	0	0	240,800
241	77,308	80,696	77,308	50,820	0	0	0	0	0	26,488
242	398,560	445,200	424,707	360,400	0	0	0	0	0	64,307
244	20,045	21,565	20,045	20,045	0	0	0	0	0	0
245	1,062,000	1,122,600	1,062,000	694,800	0	0	0	0	0	367,200

SHUYAK STAND FEASIBILITY - First Screen Deletions from Harvest Plan**SITKA SPRUCE**

Type	Total Volume (BF)			Total Net Volume by Sort (BF)						
	Net	Gross	Adjusted Net	1	2	3	4	5	6	7
246	814,875	889,605	814,875	763,200	0	0	0	0	0	51,675
248	500,520	526,893	500,520	268,893	0	0	0	0	0	231,627
249	46,560	49,013	46,560	25,013	0	0	0	0	0	21,547
260	101,531	107,117	101,531	58,487	0	0	0	0	0	43,044
263	427,960	477,880	437,320	299,520	0	0	0	0	0	137,800
264	4,423,667	4,905,270	4,590,612	3,215,044	0	0	0	61,547	0	1,314,021
267	123,685	131,415	123,685	123,685	0	0	0	0	0	0
268	61,360	94,120	91,000	91,000	0	0	0	0	0	0
269	354,120	373,620	354,120	224,640	0	0	0	61,620	0	67,860
271	2,341,080	2,500,680	2,341,080	1,517,040	0	0	0	0	0	824,040
273	449,536	516,402	494,651	384,281	0	0	0	0	0	110,370
274	169,736	179,126	169,736	169,736	0	0	0	0	0	0
278	411,230	450,262	411,230	388,926	0	0	0	0	0	22,304
280	148,680	156,870	148,680	148,680	0	0	0	0	0	0
281	38,808	51,744	47,208	36,960	0	0	0	0	0	10,248
283	42,480	44,160	42,480	21,600	0	0	0	0	0	20,880
TOTALS	30,232,104	33,716,516	31,420,263	20,729,090	109,030	0	470,916	932,455	86,517	9,092,256
	Total Weighted FAS Price			\$277	\$150	\$800	\$700	\$600	\$650	\$500

Shuyak Production Costs
Average Costs for Second Screening
(Using volume & road information resulting from First Screening)

Cost Item	Harvest Volume (MBF)	Cost/MBF	Total Cost
Right of Way Logging	11,112	\$117.00	\$1,300,104
Helicopter Logging	12,500	\$306.00	\$3,825,000
Shovel Logging	273,990	\$170.38	\$46,682,416
Total Logging	297,602	\$174.08	\$51,807,520
Road Construction	297,602	\$84.86	\$25,255,944
LTF, Sort, Dump & Tow	297,602	\$55.21	\$16,430,606
Camp Operations	297,602	\$25.00	\$7,440,050
Marketing	297,602	\$5.71	\$1,700,000
Administration	297,602	\$4.91	\$1,460,000
Total Costs	297,602	\$349.78	\$104,094,121
Profit & Risk		\$50.04	
		\$399.82	
Higrade FAS Value	\$600		
Total Harvest Acreage	17,977		
Harvest Cost/Acre	\$6,619		

SHUYAK STAND FEASIBILITY - sorted by gross value/ac for 2nd screen												
	Gross Value	Harvest Volume	Gross Value	Average Piece Size		Additional Marginal Costs =				\$131 /MBF		
Type	/MBF	/Acre	/Acre	Total Inventory	Total Less 80% 1 Sort	Harvest Pieces/Acre	Pieces per Day	Marginal Logging Cost	Total Marginal Cost per MBF	per Acre	Net Value per Acre	
276	\$455	1,697	\$773	39	50	34	168	\$1,000	\$1,131	\$1,919	(\$1,147)	
279	\$455	3,448	\$1,567	29	44	78	392	\$1,000	\$1,131	\$3,900	(\$2,332)	
189	\$443	4,259	\$1,886	36	49	87	437	\$1,000	\$1,131	\$4,817	(\$2,931)	
201	\$455	4,608	\$2,097	41	53	88	438	\$1,000	\$1,131	\$5,212	(\$3,115)	
247	\$461	4,760	\$2,192	38	50	95	474	\$983	\$1,114	\$5,303	(\$3,110)	
181	\$446	5,816	\$2,594	29	42	138	689	\$687	\$818	\$4,757	(\$2,163)	
275	\$448	5,921	\$2,654	35	49	122	608	\$773	\$904	\$5,353	(\$2,699)	
222	\$460	5,845	\$2,687	38	56	104	519	\$830	\$961	\$5,617	(\$2,930)	
32	\$466	6,560	\$3,056	56	59	111	553	\$806	\$937	\$6,147	(\$3,091)	
172	\$494	6,670	\$3,292	45	66	101	503	\$736	\$867	\$5,782	(\$2,490)	
146	\$489	6,809	\$3,331	43	57	120	602	\$713	\$844	\$5,747	(\$2,416)	
194	\$469	7,130	\$3,344	52	61	116	581	\$694	\$825	\$5,882	(\$2,539)	
250	\$484	7,075	\$3,425	51	63	112	559	\$688	\$819	\$5,794	(\$2,369)	
150	\$459	7,548	\$3,463	36	48	159	793	\$601	\$732	\$5,525	(\$2,062)	
252	\$499	7,104	\$3,543	46	59	120	601	\$693	\$824	\$5,854	(\$2,311)	
153	\$505	7,037	\$3,554	52	69	101	506	\$706	\$837	\$5,890	(\$2,336)	
195	\$466	7,659	\$3,573	44	59	130	650	\$643	\$774	\$5,928	(\$2,355)	
177	\$459	7,930	\$3,639	41	58	138	688	\$619	\$750	\$5,947	(\$2,308)	
171A	\$489	7,547	\$3,691	45	64	118	592	\$650	\$781	\$5,894	(\$2,203)	
105	\$613	6,363	\$3,901	57	96	67	333	\$1,000	\$1,131	\$7,196	(\$3,296)	
251	\$473	8,403	\$3,977	48	61	139	694	\$587	\$718	\$6,033	(\$2,056)	
190	\$469	8,504	\$3,992	37	52	163	813	\$587	\$718	\$6,106	(\$2,114)	
103	\$569	7,120	\$4,050	44	75	94	472	\$671	\$802	\$5,710	(\$1,660)	
134	\$514	7,988	\$4,108	69	89	90	448	\$607	\$738	\$5,895	(\$1,787)	
156	\$490	9,624	\$4,720	51	61	159	794	\$514	\$645	\$6,207	(\$1,488)	
112	\$506	9,393	\$4,748	63	74	126	630	\$520	\$651	\$6,115	(\$1,366)	
9	\$492	9,736	\$4,792	48	61	160	801	\$514	\$645	\$6,280	(\$1,487)	
277	\$475	10,128	\$4,811	45	56	180	901	\$494	\$625	\$6,330	(\$1,519)	
227	\$478	10,270	\$4,909	59	60	170	852	\$493	\$624	\$6,409	(\$1,500)	
232	\$513	9,666	\$4,957	54	90	107	535	\$504	\$635	\$6,138	(\$1,181)	
272	\$476	10,490	\$4,992	47	58	180	901	\$481	\$612	\$6,420	(\$1,428)	
179	\$470	10,648	\$5,002	52	70	152	761	\$468	\$599	\$6,378	(\$1,376)	
125	\$482	10,398	\$5,013	48	59	177	885	\$458	\$589	\$6,124	(\$1,112)	
207	\$498	10,121	\$5,037	50	61	166	829	\$467	\$598	\$6,052	(\$1,015)	
183	\$477	10,904	\$5,206	56	71	153	766	\$458	\$589	\$6,422	(\$1,217)	
209	\$492	10,607	\$5,221	61	93	114	568	\$467	\$598	\$6,343	(\$1,123)	
213	\$540	9,945	\$5,368	46	69	143	716	\$500	\$631	\$6,276	(\$908)	
237	\$536	10,020	\$5,370	44	68	146	732	\$502	\$633	\$6,343	(\$973)	
51	\$496	10,824	\$5,372	112	172	63	315	\$1,000	\$1,131	\$12,242	(\$6,870)	
58	\$496	10,824	\$5,372	112	172	63	315	\$1,000	\$1,131	\$12,242	(\$6,870)	
164	\$591	9,104	\$5,378	55	98	93	465	\$519	\$650	\$5,918	(\$540)	
174	\$495	10,892	\$5,392	50	66	166	831	\$461	\$592	\$6,448	(\$1,056)	
206	\$498	10,885	\$5,423	63	96	114	568	\$451	\$582	\$6,335	(\$911)	
130	\$545	10,405	\$5,669	49	75	139	695	\$466	\$597	\$6,212	(\$543)	
259	\$504	11,250	\$5,670	60	86	130	652	\$410	\$541	\$6,086	(\$416)	
254	\$476	11,923	\$5,672	42	60	199	996	\$594	\$725	\$8,644	(\$2,972)	
233	\$544	10,502	\$5,713	62	65	162	811	\$449	\$580	\$6,091	(\$378)	
262	\$476	12,009	\$5,722	42	60	200	999	\$423	\$554	\$6,653	(\$931)	
167	\$475	12,325	\$5,852	39	57	217	1,085	\$411	\$542	\$6,680	(\$828)	
253	\$477	12,379	\$5,899	44	62	198	991	\$415	\$546	\$6,759	(\$860)	
282	\$492	12,124	\$5,960	48	51	237	1,183	\$415	\$546	\$6,620	(\$660)	
136	\$505	11,855	\$5,982	60	80	149	745	\$416	\$547	\$6,485	(\$503)	
261	\$509	12,160	\$6,186	37	64	191	957	\$418	\$549	\$6,676	(\$490)	

SHUYAK STAND FEASIBILITY - sorted by gross value/ac for 2nd screen											
	Gross Value	Harvest Volume	Gross Value	Average Piece Size		Additional Marginal Costs =			\$131 /MBF		
Type	/MBF	/Acre	/Acre	Total Inventory	Total Less 80% 1 Sort	Harvest Pieces/Acre	Pieces per Day	Marginal Logging Cost	Total Marginal Cost per MBF	Marginal Cost per Acre	Net Value per Acre
68	\$554	16,680	\$9,246	138	170	98	491				
36	\$555	16,979	\$9,430	108	128	133	663				
180	\$508	18,814	\$9,549	63	81	232	1,159				
56	\$530	18,395	\$9,750	77	108	170	852				
74	\$564	17,552	\$9,899	133	190	92	462				
124A	\$547	18,133	\$9,925	57	77	235	1,175				
211	\$547	18,812	\$10,296	91	134	141	704				
63	\$596	17,363	\$10,342	118	152	114	569				
266	\$543	19,103	\$10,366	99	113	169	846				
78	\$536	19,400	\$10,396	131	125	155	774				
46	\$583	17,991	\$10,486	207	320	56	281				
47	\$583	17,991	\$10,486	207	320	56	281				
116	\$574	18,418	\$10,579	65	88	209	1,043				
118	\$574	18,418	\$10,579	65	88	209	1,043				
114	\$603	17,685	\$10,657	81	97	182	910				
21	\$569	18,964	\$10,800	92	119	159	796				
65	\$573	18,853	\$10,805	111	141	134	669				
205	\$588	18,577	\$10,931	87	138	134	672				
119	\$605	18,174	\$10,991	64	76	239	1,196				
72	\$577	19,202	\$11,082	118	150	128	640				
160	\$554	20,132	\$11,147	76	103	196	982				
161	\$476	23,696	\$11,280	60	107	221	1,106				
79	\$557	20,408	\$11,357	82	103	198	990				
97	\$612	18,709	\$11,451	99	165	114	568				
182	\$511	22,580	\$11,540	117	145	156	781	\$225	\$356	\$8,039	\$3,501
59	\$539	22,088	\$11,909	95	126	176	879				
70	\$570	21,016	\$11,972	140	186	113	564				
73	\$589	20,407	\$12,028	112	148	138	691				
184	\$542	22,443	\$12,167	53	74	302	1,511				
45	\$617	19,768	\$12,189	109	131	151	753				
61	\$617	19,768	\$12,189	109	131	151	753				
148	\$568	21,960	\$12,476	94	120	182	911				
84	\$574	21,792	\$12,499	131	154	141	707				
144	\$590	21,256	\$12,543	56	80	265	1,323				
214	\$553	22,752	\$12,576	84	117	194	969				
54	\$605	20,876	\$12,622	129	159	131	656				
48	\$565	22,535	\$12,739	190	242	93	466				
37	\$588	21,776	\$12,805	133	156	140	698				
111	\$587	22,012	\$12,923	132	178	124	618				
95	\$584	22,118	\$12,926	124	149	148	741				
196	\$536	24,365	\$13,050	75	96	255	1,275	\$300	\$431	\$10,501	\$2,549
5	\$599	22,226	\$13,308	191	233	95	477	\$286	\$417	\$9,268	\$4,039
107	\$599	22,482	\$13,465	133	155	145	723				
88	\$687	19,613	\$13,481	131	171	114	572				
39	\$637	21,199	\$13,506	130	154	138	690				
151	\$593	22,972	\$13,633	99	125	184	922				
121	\$536	25,456	\$13,640	52	65	395	1,973				
120A	\$536	25,456	\$13,640	52	65	395	1,973				
124D	\$536	25,456	\$13,640	52	65	395	1,973				
12	\$603	22,620	\$13,649	109	146	155	775				
140	\$654	20,893	\$13,654	78	112	186	930				
158	\$614	22,242	\$13,666	91	122	182	909				
106	\$644	21,894	\$14,098	91	114	192	961				

SHUYAK STAND FEASIBILITY - sorted by gross value/ac for 2nd screen											
	Gross	Harvest	Gross	Average Piece Size		Additional Marginal Costs =			\$131	/MBF	
	Value	Volume	Value	Total	Total Less	Harvest	Pieces	Marginal	Total Marginal Cost	Net Value	
Type	/MBF	/Acre	/Acre	Inventory	80% 1 Sort	Pieces/Acre	per Day	Logging Cost	per MBF	per Acre	per Acre
29	\$643	37,106	\$23,853	127	155	239	1,195				
162	\$665	36,521	\$24,300	140	152	241	1,203				
102	\$656	38,944	\$25,540	122	142	275	1,376				
104	\$670	39,088	\$26,180	99	135	290	1,452				
94	\$634	42,250	\$26,769	108	131	323	1,613				
42	\$630	45,479	\$28,662	370	376	121	605				
43	\$630	45,479	\$28,662	370	376	121	605				
57	\$562	52,052	\$29,271	111	141	369	1,843				
75	\$602	50,944	\$30,689	158	188	271	1,355				
41	\$631	48,899	\$30,850	232	266	184	918				
33	\$679	45,846	\$31,127	161	189	243	1,213				
35	\$679	45,846	\$31,127	161	189	243	1,213				
23	\$644	48,438	\$31,192	282	308	157	786				
17	\$612	57,083	\$34,931	191	239	239	1,194				
30	\$612	57,083	\$34,931	191	239	239	1,194				
11	\$697	60,930	\$42,467	165	199	307	1,534				
90	\$715	60,037	\$42,949	247	320	187	937				
TOTALS	\$575	16,646	\$9,570	79	110	152	758				

SHUYAK ISLAND HARVEST SUMMARY - second screen results								
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)	
			DBH	Merch. Height	Basal Area	# Of Stems	Adjusted Net Inventory	Estimated Harvest
1	86	5	16.0	42	275	249	1,427,600	957,180
3	62	3	19.6	50	253	179	1,310,267	916,773
5	26	2	29.1	80	270	67	755,352	577,886
6	15	1	21.5	74	282	120	507,656	441,189
7	13	1	20.5	61	240	133	294,320	208,208
8	3	1	24.8	71	313	104	93,938	78,488
10	7	1	19.8	60	375	185	208,687	183,137
11	22	1	25.2	64	810	269	1,585,980	1,340,460
12	37	2	20.6	65	260	121	979,020	836,940
13	190	11	20.1	58	225	135	3,849,055	2,985,695
14	16	*	23.3	69	305	129	486,259	450,240
15	5	*	19.8	60	375	185	149,062	130,812
16	113	6	15.8	52	313	287	3,041,583	2,738,367
17	211	11	22.9	78	347	160	13,001,677	12,044,504
18	41	2	23.3	69	305	129	1,246,039	1,153,740
19	17	1	20.7	77	240	132	569,840	527,408
20	43	2	20.1	66	313	239	1,511,719	1,323,594
21	28	2	20.5	62	240	137	621,040	530,992
22	148	6	20.5	62	344	189	4,498,259	3,712,772
23	12	1	29.0	87	450	101	681,480	581,256
24	7	*	24.8	71	313	104	219,188	183,138
25	85	4	20.0	49	240	128	1,275,000	1,010,480
26	31	2	18.3	50	220	140	474,920	444,168
27	33	1	16.0	44	375	282	670,313	523,463
29	171	6	20.9	71	333	202	7,059,095	6,345,170
30	18	*	22.9	78	347	160	1,109,148	1,027,493
31	358	19	25.5	78	219	84	11,015,849	10,070,427
33	21	1	21.8	70	540	224	1,071,630	962,766
34	21	1	21.7	79	280	115	714,000	654,864
35	22	*	21.8	70	540	224	1,122,660	1,008,612
36	98	5	20.3	67	261	131	2,574,729	1,663,917
37	57	3	21.2	68	240	107	1,561,040	1,241,232
38	25	2	17.4	51	220	148	331,500	292,700
39	55	3	22.1	71	224	98	1,212,288	1,165,965
40	10	1	24.0	74	324	110	320,220	267,948
41	20	2	25.9	85	310	97	983,940	977,988
42	16	1	31.0	94	324	65	738,720	727,661
43	5	*	31.0	94	324	65	230,850	227,394
44	79	4	18.3	53	211	139	1,335,689	968,143
45	18	1	18.2	51	200	141	370,800	355,824
46	10	1	25.8	74	188	56	248,570	179,908
47	10	*	25.8	74	188	56	248,570	179,908
48	136	7	24.9	71	229	98	4,176,367	3,064,741
49	19	1	25.8	76	200	59	495,520	481,536
50	19	1	27.2	84	200	50	594,320	537,776
54	200	9	21.6	64	244	115	4,986,667	4,175,289
55	32	1	21.8	59	200	91	500,480	482,048
56	54	3	18.1	55	267	179	1,188,000	993,312
57	43	1	20.3	69	570	324	2,906,886	2,238,253
59	25	1	19.2	61	240	135	577,000	552,200
60	41	2	17.4	52	200	165	645,340	499,708
61	18	*	18.2	51	200	141	370,800	355,824
62	26	1	21.0	79	270	130	839,532	818,239

SHUYAK ISLAND HARVEST SUMMARY - second screen results								
Type	Acres	Plots	Average		Per Acre		Total Volume (BF)	
			DBH	Merch. Height	Basal Area	# Of Stems	Adjusted Net Inventory	Estimated Harvest
122	46	3	20.2	68	253	137	1,351,787	1,302,720
123	97	5	14.1	40	263	346	1,646,430	1,279,261
126	76	5	19.0	62	305	199	2,159,312	2,009,675
127	57	3	15.7	45	375	363	1,673,188	1,462,288
128	126	6	20.9	67	274	146	3,623,580	3,335,744
129	116	5	15.0	42	288	348	2,230,912	1,628,826
137	28	2	16.9	47	260	246	520,240	379,120
139	106	7	18.0	53	234	173	2,017,029	1,635,186
140	113	2	19.8	63	282	159	2,797,976	2,360,908
141	16	1	15.3	54	381	326	524,462	405,979
142	57	2	22.5	67	282	131	1,725,749	1,543,810
143	23	1	16.8	57	200	138	343,160	253,368
144	26	2	13.0	49	240	320	662,480	552,656
145	163	5	16.8	62	363	289	6,177,701	5,463,761
147	50	3	21.7	66	333	169	1,722,917	1,647,917
148	73	6	18.7	60	247	155	1,883,400	1,603,080
151	336	21	19.6	62	298	181	9,519,232	7,718,554
152	66	3	16.1	51	345	308	1,937,004	1,713,716
157	13	1	17.4	55	200	132	224,120	203,736
158	41	3	18.0	52	333	221	1,030,125	911,908
160	167	9	16.9	56	236	219	3,943,427	3,362,118
161	12	1	15.5	44	372	357	362,328	284,357
162	33	3	21.1	71	292	140	1,216,188	1,205,188
163	19	2	18.9	58	280	168	483,740	453,948
165	15	1	19.2	64	240	145	379,800	356,280
166	22	2	16.1	50	151	148	314,254	276,691
168	43	5	14.5	39	251	273	609,444	531,869
169	98	7	14.5	43	183	187	1,295,280	1,197,616
170	798	36	17.8	51	234	169	13,956,101	12,305,263
175	120	8	15.2	41	276	270	1,960,215	1,747,858
176	61	5	16.3	46	281	277	1,182,546	883,714
180	48	3	16.6	47	342	276	1,128,384	903,053
182	21	1	19.2	56	310	162	631,470	474,188
184	36	2	13.7	45	306	357	943,290	807,930

SHUYAK ISLAND HARVEST SUMMARY - second screen results									
Projected Harvest Plan									
Type	Adjusted Net Volume (bf)	Total Net Volume by Sort (BF)							
		1		2	3	4	5	6	7
1	1,427,600	588,025	117,605	251,550	0	198,875	0	0	389,150
3	1,310,267	491,867	98,373	339,760	0	85,147	129,787	0	263,707
5	755,352	221,832	44,366	107,406	0	43,524	316,602	0	65,988
6	507,656	83,084	16,617	0	0	229,537	90,829	0	104,207
7	294,320	107,640	21,528	0	0	0	88,920	0	97,760
8	93,938	19,313	3,863	17,063	0	33,563	0	0	24,000
10	208,687	31,937	6,387	0	0	64,313	112,438	0	0
11	1,585,980	306,900	61,380	799,920	0	227,700	0	0	251,460
12	979,020	177,600	35,520	0	0	387,760	0	142,820	270,840
13	3,849,055	1,079,200	215,840	134,036	0	1,062,618	318,509	126,436	1,128,255
14	486,259	45,024	9,005	207,486	0	128,694	0	0	105,056
15	149,062	22,812	4,562	0	0	45,938	80,313	0	0
16	3,041,583	379,021	75,804	596,781	0	679,177	0	297,802	1,088,802
17	13,001,677	1,196,466	239,293	1,487,790	0	3,983,824	1,143,716	496,330	4,693,551
18	1,246,039	115,374	23,075	531,682	0	329,777	0	0	269,206
19	569,840	53,040	10,608	294,440	0	0	67,320	0	155,040
20	1,511,719	235,156	47,031	435,375	0	384,313	162,594	88,688	205,594
21	621,040	112,560	22,512	0	0	59,920	182,560	96,880	169,120
22	4,498,259	981,859	196,372	86,839	0	899,652	1,236,587	60,208	1,233,114
23	681,480	125,280	25,056	79,920	0	224,640	235,440	0	16,200
24	219,188	45,063	9,013	39,813	0	78,313	0	0	56,000
25	1,275,000	330,650	66,130	205,700	0	435,200	56,950	0	246,500
26	474,920	38,440	7,688	129,580	0	88,660	37,820	0	180,420
27	670,313	183,563	36,713	0	0	0	0	0	486,750
29	7,059,095	892,406	178,481	1,277,156	0	1,720,688	1,610,250	536,156	1,022,438
30	1,109,148	102,068	20,414	126,921	0	339,852	97,568	42,341	400,398
31	11,015,849	1,181,777	236,355	795,137	0	4,213,095	3,442,076	45,975	1,337,789
33	1,071,630	136,080	27,216	542,430	0	0	190,890	0	202,230
34	714,000	73,920	14,784	0	0	247,800	314,160	0	78,120
35	1,122,660	142,560	28,512	568,260	0	0	199,980	0	211,860
36	2,574,729	1,138,515	227,703	248,617	0	265,689	205,936	156,853	559,121
37	1,561,040	399,760	79,952	47,880	0	413,440	322,240	53,200	324,520
38	331,500	48,500	9,700	0	0	81,500	0	81,500	120,000
39	1,212,288	57,904	11,581	270,424	0	291,368	245,168	0	347,424
40	320,220	65,340	13,068	0	0	147,420	64,260	0	43,200
41	983,940	7,440	1,488	0	0	600,780	83,700	0	292,020
42	738,720	13,824	2,765	0	0	337,824	281,664	0	105,408
43	230,850	4,320	864	0	0	105,570	88,020	0	32,940
44	1,335,689	459,432	91,886	0	0	151,909	353,837	66,692	303,818
45	370,800	18,720	3,744	0	0	80,640	153,360	75,600	42,480
46	248,570	85,827	17,165	0	0	67,067	75,040	0	20,636
47	248,570	85,827	17,165	0	0	67,067	75,040	0	20,636
48	4,176,367	1,389,532	277,906	125,120	0	394,011	1,809,966	0	457,737
49	495,520	17,480	3,496	0	0	38,760	397,480	0	41,800
50	594,320	70,680	14,136	0	0	186,200	249,280	0	88,160
54	4,986,667	1,014,222	202,844	363,556	0	1,464,000	1,058,667	0	1,086,222
55	500,480	23,040	4,608	0	0	0	295,680	0	181,760
56	1,188,000	243,360	48,672	0	0	144,000	180,720	0	619,920
57	2,906,886	835,791	167,158	0	0	671,574	637,260	0	762,261
59	577,000	31,000	6,200	0	0	0	238,000	0	308,000
60	645,340	182,040	36,408	0	0	75,440	205,820	0	182,040
61	370,800	18,720	3,744	0	0	80,640	153,360	75,600	42,480
62	839,532	26,616	5,323	0	0	220,428	352,404	0	240,084

SHUYAK ISLAND HARVEST SUMMARY - second screen results									
Projected Harvest Plan									
Type	Adjusted Net Volume (bf)	Total Net Volume by Sort (BF)							
		1		2	3	4	5	6	7
122	1,351,787	61,333	12,267	601,067	0	135,547	0	253,307	300,533
123	1,646,430	458,961	91,792	85,600	0	0	158,451	154,808	788,611
126	2,159,312	187,046	37,409	603,350	0	275,604	96,006	441,960	555,347
127	1,673,188	263,625	52,725	0	0	172,188	239,875	527,250	470,250
128	3,623,580	359,795	71,959	0	0	1,312,020	950,253	168,562	832,950
129	2,230,912	752,608	150,522	0	0	277,472	121,568	384,192	695,072
137	520,240	176,400	35,280	0	0	111,440	157,360	0	75,040
139	2,017,029	477,303	95,461	79,954	0	257,429	368,274	228,354	605,714
140	2,797,976	546,335	109,267	490,640	0	912,326	209,517	334,166	304,993
141	524,462	148,104	29,621	0	0	71,438	0	304,920	0
142	1,725,749	227,424	45,485	0	0	655,517	385,284	0	457,524
143	343,160	112,240	22,448	0	0	65,320	0	109,480	56,120
144	662,480	137,280	27,456	131,040	0	68,120	0	43,160	282,880
145	6,177,701	892,425	178,485	1,220,463	0	1,222,500	160,963	861,863	1,819,488
147	1,722,917	93,750	18,750	276,042	0	500,000	429,167	0	423,958
148	1,883,400	350,400	70,080	50,613	0	316,333	231,167	214,620	720,267
151	9,519,232	2,250,848	450,170	881,888	0	1,690,368	1,530,656	822,368	2,343,104
152	1,937,004	279,111	55,822	245,570	0	240,778	309,058	197,654	664,835
157	224,120	25,480	5,096	0	0	0	87,880	0	110,760
158	1,030,125	147,771	29,554	82,000	0	249,417	123,000	186,208	241,729
160	3,943,427	726,636	145,327	0	0	499,516	1,001,258	209,307	1,506,711
161	362,328	97,464	19,493	0	0	0	0	0	264,864
162	1,216,188	13,750	2,750	334,125	0	165,000	167,063	335,500	200,750
163	483,740	37,240	7,448	45,600	0	136,420	0	68,020	196,460
165	379,800	29,400	5,880	174,600	0	83,400	0	37,200	55,200
166	314,254	46,953	9,391	0	0	0	147,884	62,111	57,305
168	609,444	96,968	19,394	65,113	0	74,014	0	0	373,348
169	1,295,280	122,080	24,416	68,320	0	141,120	0	198,800	764,960
170	13,956,101	2,063,548	412,710	1,542,231	0	1,382,939	1,602,568	1,646,012	5,718,803
175	1,960,215	265,446	53,089	0	0	149,269	96,462	143,636	1,305,402
176	1,182,546	373,540	74,708	0	0	0	293,166	0	515,840
180	1,128,384	281,664	56,333	0	0	0	265,248	0	581,472
182	631,470	196,602	39,320	0	0	0	190,092	0	244,776
184	943,290	169,200	33,840	0	0	90,522	0	185,274	498,294

SHUYAK ISLAND HARVEST SUMMARY - second screen results

Type	Gross Value	Harvest Volume	Gross Value	Average Piece Size		Additional Marginal Costs =			\$131 /MBF		Net Value
	/MBF	/Acre	/Acre	Total Inventory	Total Less 80% 1 Sort	Harvest Pieces/Acre	Pieces per Day	Marginal Logging Cost	Total Marginal Cost per MBF	per Acre	
1	\$577	11,130	\$6,426	59	82	136	680	\$444	\$575	\$6,400	\$27
3	\$606	14,787	\$8,966	104	131	113	564	\$363	\$494	\$7,305	\$1,661
5	\$599	22,226	\$13,308	191	233	95	477	\$286	\$417	\$9,268	\$4,039
6	\$611	29,413	\$17,985	162	157	188	938	\$203	\$334	\$9,824	\$8,161
7	\$507	16,016	\$8,112	102	118	136	678	\$357	\$488	\$7,816	\$297
8	\$634	26,163	\$16,574	151	177	148	741	\$208	\$339	\$8,869	\$7,705
10	\$619	26,162	\$16,206	111	158	166	829				
11	\$697	60,930	\$42,467	165	199	307	1,534				
12	\$603	22,620	\$13,649	109	146	155	775				
13	\$576	15,714	\$9,057	96	129	121	607				
14	\$688	28,140	\$19,372	126	170	165	826				
15	\$619	26,162	\$16,206	111	158	166	829				
16	\$622	24,233	\$15,064	72	90	271	1,353				
17	\$612	57,083	\$34,931	191	239	239	1,194				
18	\$688	28,140	\$19,372	126	170	165	826				
19	\$673	31,024	\$20,886	147	180	172	862				
20	\$667	30,781	\$20,520	130	163	189	943				
21	\$569	18,964	\$10,800	92	119	159	796				
22	\$573	25,086	\$14,367	98	129	195	976				
23	\$644	48,438	\$31,192	282	308	157	786				
24	\$634	26,163	\$16,574	151	177	148	741				
25	\$630	11,888	\$7,489	78	115	103	516	\$366	\$497	\$5,908	\$1,580
26	\$630	14,328	\$9,025	75	101	142	709				
27	\$475	15,863	\$7,542	59	59	270	1,348				
29	\$643	37,106	\$23,853	127	155	239	1,195				
30	\$612	57,083	\$34,931	191	239	239	1,194				
31	\$634	28,130	\$17,835	194	239	118	588				
33	\$679	45,846	\$31,127	161	189	243	1,213				
34	\$616	31,184	\$19,202	136	160	195	977				
35	\$679	45,846	\$31,127	161	189	243	1,213				
36	\$555	16,979	\$9,430	108	128	133	663				
37	\$588	21,776	\$12,805	133	156	140	698				
38	\$586	11,708	\$6,859	61	81	145	724	\$425	\$556	\$6,510	\$350
39	\$637	21,199	\$13,506	130	154	138	690				
40	\$617	26,795	\$16,531	137	196	136	682				
41	\$631	48,899	\$30,850	232	266	184	918				
42	\$630	45,479	\$28,662	370	376	121	605				
43	\$630	45,479	\$28,662	370	376	121	605				
44	\$545	12,255	\$6,679	86	116	106	530	\$406	\$537	\$6,581	\$99
45	\$617	19,768	\$12,189	109	131	151	753				
46	\$583	17,991	\$10,486	207	320	56	281				
47	\$583	17,991	\$10,486	207	320	56	281				
48	\$565	22,535	\$12,739	190	242	93	466				
49	\$596	25,344	\$15,108	205	262	97	483				
50	\$606	28,304	\$17,164	245	297	95	476				
54	\$605	20,876	\$12,622	129	159	131	656				
55	\$558	15,064	\$8,406	122	142	106	530				
56	\$530	18,395	\$9,750	77	108	170	852				
57	\$562	52,052	\$29,271	111	141	369	1,843				
59	\$539	22,088	\$11,909	95	126	176	879				
60	\$546	12,188	\$6,653	69	109	112	561	\$408	\$539	\$6,569	\$84
61	\$617	19,768	\$12,189	109	131	151	753				
62	\$595	31,471	\$18,715	136	162	194	972				

SHUYAK ISLAND HARVEST SUMMARY - second screen results											
	Gross	Harvest	Gross	Average Piece Size		Additional Marginal Costs =			\$131	/MBF	
	Value	Volume	Value	Total	Total Less	Harvest	Pieces	Marginal	Total Marginal Cost	Net Value	
Type	/MBF	/Acre	/Acre	Inventory	80% 1 Sort	Pieces/Acre	per Day	Logging Cost	per MBF	per Acre	per Acre
122	\$685	28,320	\$19,402	121	144	197	986				
123	\$525	13,188	\$6,930	42	70	189	946	\$384	\$515	\$6,792	\$138
126	\$649	26,443	\$17,155	99	108	244	1,220				
127	\$581	25,654	\$14,916	62	97	264	1,318				
128	\$607	26,474	\$16,075	116	141	188	940				
129	\$545	14,042	\$7,647	49	76	185	927				
137	\$568	13,540	\$7,687	62	117	115	577				
139	\$569	15,426	\$8,781	79	108	143	713				
140	\$654	20,893	\$13,654	78	112	186	930				
141	\$622	25,374	\$15,791	70	102	248	1,239				
142	\$600	27,084	\$16,239	125	149	181	906				
143	\$585	11,016	\$6,448	54	81	136	678	\$452	\$583	\$6,422	\$26
144	\$590	21,256	\$12,543	56	80	265	1,323				
145	\$627	33,520	\$21,015	81	105	319	1,595				
147	\$633	32,958	\$20,863	128	154	213	1,067				
148	\$568	21,960	\$12,476	94	120	182	911				
151	\$593	22,972	\$13,633	99	125	184	922				
152	\$595	25,965	\$15,450	71	97	269	1,345				
157	\$534	15,672	\$8,375	94	140	112	562				
158	\$614	22,242	\$13,666	91	122	182	909				
160	\$554	20,132	\$11,147	76	103	196	982				
161	\$476	23,696	\$11,280	60	107	221	1,106				
162	\$665	36,521	\$24,300	140	152	241	1,203				
163	\$607	23,892	\$14,502	101	124	193	966				
165	\$704	23,752	\$16,715	106	147	162	809				
166	\$575	12,577	\$7,235	71	112	112	562	\$398	\$529	\$6,653	\$582
168	\$552	12,369	\$6,825	53	67	185	924	\$408	\$539	\$6,667	\$158
169	\$558	12,221	\$6,825	61	72	170	848	\$409	\$540	\$6,599	\$225
170	\$581	15,420	\$8,966	79	105	147	737				
175	\$524	14,565	\$7,637	54	70	208	1,038				
176	\$504	14,487	\$7,296	55	85	171	857	\$350	\$481	\$6,968	\$327
180	\$508	18,814	\$9,549	63	81	232	1,159				
182	\$511	22,580	\$11,540	117	145	156	781	\$225	\$356	\$8,039	\$3,501
184	\$542	22,443	\$12,167	53	74	302	1,511				

SHUYAK ISLAND HARVEST SUMMARY - third screen worksheet

Type	Gross Value	Harvest Volume	Gross Value	Additional Marginal Costs =			\$131 /MBF		Marginal Road Construction Cost =			\$120,000	/mile
	/MBF	/Acre	/Acre	Harvest Pieces/Acre	Pieces per Day	Marginal Logging Cost	Total Marginal Cost per MBF	per Acre	Net Value per Acre	Net Value After Logging	Miles of Road Const.	Total Road Const. Cost	Total Net Value
1	\$577	11,130	\$6,426	136	680	\$444	\$575	\$6,400	\$27	\$2,290	1.10	\$132,000	(\$129,710)
3	\$606	14,787	\$8,966	113	564	\$363	\$494	\$7,305	\$1,661				
5	\$599	22,226	\$13,308	95	477	\$286	\$417	\$9,268	\$4,039				
6	\$611	29,413	\$17,985	188	938	\$203	\$334	\$9,824	\$8,161				
7	\$507	16,016	\$8,112	136	678	\$357	\$488	\$7,816	\$297				
8	\$634	26,163	\$16,574	148	741	\$208	\$339	\$8,869	\$7,705				
10	\$619	26,162	\$16,206	166	829								
11	\$697	60,930	\$42,467	307	1,534								
12	\$603	22,620	\$13,649	155	775								
13	\$576	15,714	\$9,057	121	607								
14	\$688	28,140	\$19,372	165	826								
15	\$619	26,162	\$16,206	166	829								
16	\$622	24,233	\$15,064	271	1,353								
17	\$612	57,083	\$34,931	239	1,194								
18	\$688	28,140	\$19,372	165	826								
19	\$673	31,024	\$20,886	172	862								
20	\$667	30,781	\$20,520	189	943								
21	\$569	18,964	\$10,800	159	796								
22	\$573	25,086	\$14,367	195	976								
23	\$644	48,438	\$31,192	157	786								
24	\$634	26,163	\$16,574	148	741								
25	\$630	11,888	\$7,489	103	516	\$366	\$497	\$5,908	\$1,580				
26	\$630	14,328	\$9,025	142	709								
27	\$475	15,863	\$7,542	270	1,348								
29	\$643	37,106	\$23,853	239	1,195								
30	\$612	57,083	\$34,931	239	1,194								
31	\$634	28,130	\$17,835	118	588								
33	\$679	45,846	\$31,127	243	1,213								
34	\$616	31,184	\$19,202	195	977								
35	\$679	45,846	\$31,127	243	1,213								
36	\$555	16,979	\$9,430	133	663								
37	\$588	21,776	\$12,805	140	698								
38	\$586	11,708	\$6,859	145	724	\$425	\$556	\$6,510	\$350				
39	\$637	21,199	\$13,506	138	690								
40	\$617	26,795	\$16,531	136	682								
41	\$631	48,899	\$30,850	184	918								
42	\$630	45,479	\$28,662	121	605								
43	\$630	45,479	\$28,662	121	605								
44	\$545	12,255	\$6,679	106	530	\$406	\$537	\$6,581	\$99				
45	\$617	19,768	\$12,189	151	753								
46	\$583	17,991	\$10,486	56	281								
47	\$583	17,991	\$10,486	56	281								
48	\$565	22,535	\$12,739	93	466								
49	\$596	25,344	\$15,108	97	483								
50	\$606	28,304	\$17,164	95	476								
54	\$605	20,876	\$12,622	131	656								
55	\$558	15,064	\$8,406	106	530								
56	\$530	18,395	\$9,750	170	852								
57	\$562	52,052	\$29,271	369	1,843								
59	\$539	22,088	\$11,909	176	879								
60	\$546	12,188	\$6,653	112	561	\$408	\$539	\$6,569	\$84				
61	\$617	19,768	\$12,189	151	753								
62	\$595	31,471	\$18,715	194	972								
63	\$596	17,363	\$10,342	114	569								
64	\$575	25,774	\$14,813	163	813								
65	\$573	18,853	\$10,805	134	669								
66	\$622	31,704	\$19,708	142	708								

SHUYAK ISLAND HARVEST SUMMARY - third screen worksheet

	Gross Value	Harvest Volume	Gross Value	Additional Marginal Costs =			\$131	/MBF	Marginal Road Construction Cost =			\$120,000	/mile
Type	/MBF	/Acre	/Acre	Harvest Pieces/Acre	Pieces per Day	Marginal Logging Cost	Total Marginal Cost per MBF	per Acre	Net Value per Acre	Net Value After Logging	Miles of Road Cons.	Total Road Const. Cost	Total Net Value
140	\$654	20,893	\$13,654	186	930								
141	\$622	25,374	\$15,791	248	1,239								
142	\$600	27,084	\$16,239	181	906								
143	\$585	11,016	\$6,448	136	678	\$452	\$583	\$6,422	\$26				
144	\$590	21,256	\$12,543	265	1,323								
145	\$627	33,520	\$21,015	319	1,595								
147	\$633	32,958	\$20,863	213	1,067								
148	\$568	21,960	\$12,476	182	911								
151	\$593	22,972	\$13,633	184	922								
152	\$595	25,965	\$15,450	269	1,345								
157	\$534	15,672	\$8,375	112	562	\$308	\$439	\$6,880	\$1,495	\$19,432	0.20	\$24,000	(\$4,568)
158	\$614	22,242	\$13,666	182	909								
160	\$554	20,132	\$11,147	196	982								
161	\$476	23,696	\$11,280	221	1,106	\$317	\$448	\$10,616	\$664	\$7,964	0.20	\$24,000	(\$16,036)
162	\$665	36,521	\$24,300	241	1,203								
163	\$607	23,892	\$14,502	193	966								
165	\$704	23,752	\$16,715	162	809								
166	\$575	12,577	\$7,235	112	562	\$398	\$529	\$6,653	\$582	\$12,794			
168	\$552	12,369	\$6,825	185	924	\$408	\$539	\$6,667	\$158	\$6,806			
169	\$558	12,221	\$6,825	170	848	\$409	\$540	\$6,599	\$225				
170	\$581	15,420	\$8,966	147	737								
175	\$524	14,565	\$7,637	208	1,038	\$330	\$461	\$6,715	\$922	\$110,631	1.10	\$132,000	(\$21,369)
176	\$504	14,487	\$7,296	171	857	\$350	\$481	\$6,968	\$327	\$19,959	1.40	\$168,000	(\$148,041)
180	\$508	18,814	\$9,549	232	1,159								
182	\$511	22,580	\$11,540	156	781								
184	\$542	22,443	\$12,167	302	1,511	\$225	\$356	\$7,990	\$4,178	\$150,393	1.00	\$120,000	\$30,393
196	\$536	24,365	\$13,050	255	1,275	\$300	\$431	\$10,501	\$2,549	\$76,464	1.10	\$132,000	(\$55,536)
199	\$507	14,455	\$7,326	174	868	\$353	\$484	\$6,996	\$330	\$39,589	2.00	\$240,000	(\$200,411)
204	\$509	14,586	\$7,427	163	816	\$352	\$483	\$7,045	\$381	\$43,855	0.40	\$48,000	(\$4,145)
205	\$588	18,577	\$10,931	134	672	\$273	\$404	\$7,505	\$3,426	\$616,625	3.40	\$408,000	\$208,625
211	\$547	18,812	\$10,296	141	704	\$277	\$408	\$7,675	\$2,620	\$256,790	1.50	\$180,000	\$76,790
212	\$525	14,314	\$7,512	149	744	\$351	\$482	\$6,900	\$612	\$132,826	1.60	\$192,000	(\$59,174)
214	\$553	22,752	\$12,576	194	969	\$236	\$367	\$8,350	\$4,226	\$946,657	1.60	\$192,000	\$754,657
215	\$553	12,758	\$7,059	194	968	\$401	\$532	\$6,787	\$271	\$33,635	2.90	\$348,000	(\$314,365)
217	\$588	14,513	\$8,531	100	500	\$347	\$478	\$6,937	\$1,594	\$15,938	0.20	\$24,000	(\$8,062)
218	\$588	14,513	\$8,531	100	501								
226	\$513	12,852	\$6,596	173	867	\$381	\$512	\$6,580	\$16				
229	\$604	15,025	\$9,081	109	543								
236	\$611	28,392	\$17,357	237	1,186	\$196	\$327	\$9,284	\$8,073	\$242,178	2.90	\$348,000	(\$105,822)
238	\$565	16,155	\$9,134	150	1,003	\$317	\$448	\$7,238	\$1,896	\$236,996	3.50	\$420,000	(\$183,004)
243	\$532	16,454	\$8,759	199	994	\$316	\$447	\$7,355	\$1,405	\$363,816	5.60	\$672,000	(\$308,184)
255	\$567	12,314	\$6,988	90	450	\$402	\$533	\$6,564	\$424	\$63,233			
256	\$528	16,643	\$8,791	203	1,016								
257	\$540	12,865	\$6,948	138	689	\$392	\$523	\$6,728	\$219				
265	\$643	24,948	\$16,048	223	1,114								
266	\$543	19,103	\$10,366	169	846								
284	\$588	14,513	\$8,531	100	501	\$347	\$478	\$6,937	\$1,594	\$33,469	0.25	\$30,000	\$3,469
120A	\$536	25,456	\$13,640	395	1,973								
120B	\$558	25,792	\$14,392	334	1,669								
124A	\$547	18,133	\$9,925	235	1,175								
124B	\$519	17,155	\$8,899	155	774								
124C	\$520	15,827	\$8,230	165	826								
124D	\$536	25,456	\$13,640	395	1,973	\$388	\$519	\$13,212	\$429	\$2,144	0.30	\$36,000	(\$33,856)
TOTAL	\$594	22,017	\$13,074	169	847								

SHUYAK ISLAND FINAL HARVEST PLAN

Type	Harvest Acres	Logging System	Total Estimated	SITKA SPRUCE						
			Adjusted Net	Total Estimated Harvest Volume by Sort (bf)						
			Harvest Volume	1	2	3	4	5	6	7
3	62	Conventional	916,773	98,373	339,760	0	85,147	129,787	0	263,707
5	26	Conventional	577,886	44,366	107,406	0	43,524	316,602	0	65,988
6	15	Conventional	441,189	16,617	0	0	229,537	90,829	0	104,207
7	13	Conventional	208,208	21,528	0	0	0	88,920	0	97,760
8	3	Conventional	78,488	3,863	17,063	0	33,563	0	0	24,000
9	8	Sort Yard	84,800	8,640	0	0	0	0	0	76,160
10	7	Conventional	183,137	6,387	0	0	64,313	112,438	0	0
11	22	Conventional	1,340,460	61,380	799,920	0	227,700	0	0	251,460
12	37	Conventional	836,940	35,520	0	0	387,760	0	142,820	270,840
13	190	Conventional	2,985,695	215,840	134,036	0	1,062,618	318,509	126,436	1,128,255
14	16	Conventional	450,240	9,005	207,486	0	128,694	0	0	105,056
15	5	Conventional	130,812	4,562	0	0	45,938	80,313	0	0
16	113	Conventional	2,738,367	75,804	596,781	0	679,177	0	297,802	1,088,802
17	211	Conventional	12,044,504	239,293	1,487,790	0	3,983,824	1,143,716	496,330	4,693,551
18	41	Conventional	1,153,740	23,075	531,682	0	329,777	0	0	269,206
19	17	Conventional	527,408	10,608	294,440	0	0	67,320	0	155,040
20	43	Conventional	1,323,594	47,031	435,375	0	384,313	162,594	88,688	205,594
21	28	Conventional	530,992	22,512	0	0	59,920	182,560	96,880	169,120
22	148	Conventional	3,712,772	196,372	86,839	0	899,652	1,236,587	60,208	1,233,114
23	12	Conventional	581,256	25,056	79,920	0	224,640	235,440	0	16,200
24	7	Conventional	183,138	9,013	39,813	0	78,313	0	0	56,000
25	85	Conventional	1,010,480	66,130	205,700	0	435,200	56,950	0	246,500
26	31	Conventional	444,168	7,688	129,580	0	88,660	37,820	0	180,420
27	33	Selective	523,463	36,713	0	0	0	0	0	486,750
29	171	Conventional	6,345,170	178,481	1,277,156	0	1,720,688	1,610,250	536,156	1,022,438
30	18	Conventional	1,027,493	20,414	126,921	0	339,852	97,568	42,341	400,398
31	358	Conventional	10,070,427	236,355	795,137	0	4,213,095	3,442,076	45,975	1,337,789
33	21	Heli-water	962,766	27,216	542,430	0	0	190,890	0	202,230
34	21	Conventional	654,864	14,784	0	0	247,800	314,160	0	78,120
35	22	Conventional	1,008,612	28,512	568,260	0	0	199,980	0	211,860
36	98	Conventional	1,663,917	227,703	248,617	0	265,689	205,936	156,853	559,121
37	57	Conventional	1,241,232	79,952	47,880	0	413,440	322,240	53,200	324,520
38	25	Selective	292,700	9,700	0	0	81,500	0	81,500	120,000
39	55	Conventional	1,165,965	11,581	270,424	0	291,368	245,168	0	347,424
40	10	Conventional	267,948	13,068	0	0	147,420	64,260	0	43,200
41	20	Conventional	977,988	1,488	0	0	600,780	83,700	0	292,020
42	16	Conventional	727,661	2,765	0	0	337,824	281,664	0	105,408
43	5	Conventional	227,394	864	0	0	105,570	88,020	0	32,940
44	79	Conventional	968,143	91,886	0	0	151,909	353,837	66,692	303,818
45	18	Conventional	355,824	3,744	0	0	80,640	153,360	75,600	42,480
46	10	Conventional	179,908	17,165	0	0	67,067	75,040	0	20,636
47	10	Conventional	179,908	17,165	0	0	67,067	75,040	0	20,636
48	136	Conventional	3,064,741	277,906	125,120	0	394,011	1,809,966	0	457,737
49	19	Conventional	481,536	3,496	0	0	38,760	397,480	0	41,800
50	19	Conventional	537,776	14,136	0	0	186,200	249,280	0	88,160
51	6	Selective	97,416	13,176	0	0	0	42,480	0	41,760
54	200	Conventional	4,175,289	202,844	363,556	0	1,464,000	1,058,667	0	1,086,222
55	32	Conventional	482,048	4,608	0	0	0	295,680	0	181,760
56	54	Conventional	993,312	48,672	0	0	144,000	180,720	0	619,920
57	43	Conventional	2,238,253	167,158	0	0	671,574	637,260	0	762,261
58	7	Selective	57,600	4,500	0	0	0	33,000	0	20,100
59	25	Conventional	552,200	6,200	0	0	0	238,000	0	308,000
60	41	Conventional	499,708	36,408	0	0	75,440	205,820	0	182,040
61	18	Conventional	355,824	3,744	0	0	80,640	153,360	75,600	42,480
62	26	Conventional	818,239	5,323	0	0	220,428	352,404	0	240,084
63	287	Conventional	4,983,140	227,960	378,020	0	1,428,440	1,516,180	38,540	1,394,000
64	83	Conventional	2,139,242	71,712	0	0	363,540	1,122,160	0	581,830

SHUYAK ISLAND FINAL HARVEST PLAN

Type	Acres	Logging System	Total Estimated	SITKA SPRUCE						
			Adjusted Net	Total Estimated Harvest Volume by Sort (bf)						
			Harvest Volume	1	2	3	4	5	6	7
128	126	Conventional	3,335,744	71,959	0	0	1,312,020	950,253	168,562	832,950
129	76	Selective	1,250,000	62,500	0	0	250,000	115,000	350,000	472,500
137	28	Conventional	379,120	35,280	0	0	111,440	157,360	0	75,040
139	106	Conventional	1,635,186	95,461	79,954	0	257,429	368,274	228,354	605,714
140	113	Conventional	2,360,908	109,267	490,640	0	912,326	209,517	334,166	304,993
141	16	Conventional	405,979	29,621	0	0	71,438	0	304,920	0
142	57	Conventional	1,543,810	45,485	0	0	655,517	385,284	0	457,524
143	23	Conventional	253,368	22,448	0	0	65,320	0	109,480	56,120
144	26	Conventional	552,656	27,456	131,040	0	68,120	0	43,160	282,880
145	163	Conventional	5,463,761	178,485	1,220,463	0	1,222,500	160,963	861,863	1,819,488
146	10	Selective	39,570	5,870	0	0	10,200	0	3,500	20,000
147	50	Conventional	1,647,917	18,750	276,042	0	500,000	429,167	0	423,958
148	73	Conventional	1,603,080	70,080	50,613	0	316,333	231,167	214,620	720,267
151	336	Conventional	7,718,554	450,170	881,888	0	1,690,368	1,530,656	822,368	2,343,104
152	66	Conventional	1,713,716	55,822	245,570	0	240,778	309,058	197,654	664,835
153	5	Selective	35,000	2,000	0	0	0	18,000	0	15,000
158	41	Conventional	911,908	29,554	82,000	0	249,417	123,000	186,208	241,729
159	40	Selective	341,500	31,000	0	0	0	163,600	0	146,900
160	125	Selective	2,500,000	125,000	0	0	440,000	908,000	125,000	902,000
162	33	Conventional	1,205,188	2,750	334,125	0	165,000	167,063	335,500	200,750
163	19	Conventional	453,948	7,448	45,600	0	136,420	0	68,020	196,460
164	15	Selective	120,830	5,430	0	0	8,700	0	96,300	10,400
165	15	Conventional	356,280	5,880	174,600	0	83,400	0	37,200	55,200
166	22	Conventional	276,691	9,391	0	0	0	147,884	62,111	57,305
168	33	Selective	495,000	20,000	65,000	0	70,000	0	0	340,000
169	89	Selective	865,000	15,000	60,000	0	120,000	0	170,000	500,000
170	798	Conventional	12,305,263	412,710	1,542,231	0	1,382,939	1,602,568	1,646,012	5,718,803
171	150	Selective	551,000	25,000	0	0	50,000	145,000	81,000	250,000
174	30	Selective	195,000	7,000	0	0	0	52,000	81,000	55,000
175	50	Conventional	372,000	22,000	0	0	120,000	80,000	100,000	50,000
180	12	Selective	225,000	11,000	0	0	0	88,000	0	126,000
182	21	Conventional	474,188	39,320	0	0	0	190,092	0	244,776
184	24	Selective	462,000	27,000	0	0	61,000	0	124,000	250,000
185	35	Selective	123,000	6,000	0	0	0	77,000	0	40,000
204	115	Heli-road	546,000	26,000	0	0	0	300,000	95,000	125,000
205	180	Conventional	3,343,811	408,175	510,546	0	849,600	1,010,618	95,564	469,309
211	98	Selective	1,843,594	127,535	0	0	157,443	1,003,285	0	555,331
212	100	Conventional	1,900,000	95,000	35,000	0	287,000	535,000	53,000	895,000
214	224	Conventional	5,096,448	430,080	130,816	0	1,158,229	1,381,632	68,693	1,926,997
218	4	Conventional	58,051	5,485	0	0	17,612	34,954	0	0
229	50	Heli-water	616,000	29,000	250,000	0	325,000	0	0	12,000
255	35	Heli-water	428,000	10,000	45,000	0	95,000	160,000	8,000	110,000
256	4	Heli-water	38,000	4,000	1,000	0	10,000	3,000	0	20,000
257	37	Heli-water	241,300	11,000	0	0	52,300	126,000	32,000	20,000
265	30	Conventional	748,440	29,640	133,200	0	66,000	0	429,600	90,000
284	21	Conventional	304,769	28,797	0	0	92,461	183,511	0	0
120A	10	Conventional	254,560	6,160	0	0	0	0	75,200	173,200
120B	5	Conventional	128,960	2,860	0	0	0	18,800	44,000	63,300
124A	20	Selective	354,000	12,000	0	0	60,000	0	82,000	200,000
124B	64	Conventional	1,097,899	54,272	0	0	0	395,947	0	647,680
124C	58	Conventional	917,947	37,893	0	0	0	316,293	0	563,760
TOTALS	9,680		216,309,095	9,224,443	23,917,583	0	51,860,516	52,885,082	15,508,327	62,913,146

SHUYAK ISLAND FINAL HARVEST PLAN									
								Gross	Harvest
	Total Gross Value by Sort (BF)							Value	Volume
Type	1	2	3	4	5	6	7	/MBF	/Acre
65	\$6,264	\$0	-	\$181,440	\$223,344	\$0	\$172,440	\$573	18,853
66	\$15,468	\$241,016	-	\$276,031	\$235,188	\$38,493	\$120,085	\$622	31,704
67	\$3,671	\$0	-	\$58,520	\$94,392	\$0	\$15,200	\$581	15,568
68	\$5,040	\$0	-	\$39,900	\$165,240	\$0	\$67,200	\$554	16,680
69	\$20,413	\$0	-	\$516,858	\$588,190	\$0	\$319,464	\$579	28,663
70	\$2,864	\$0	-	\$42,196	\$64,416	\$0	\$22,220	\$570	21,016
71	\$2,481	\$0	-	\$56,818	\$243,968	\$0	\$71,119	\$579	28,111
72	\$10,113	\$0	-	\$271,510	\$493,709	\$0	\$244,224	\$577	19,202
73	\$19,123	\$61,440	-	\$501,581	\$320,717	\$0	\$251,856	\$589	20,407
74	\$468	\$0	-	\$0	\$73,920	\$0	\$24,600	\$564	17,552
75	\$959	\$0	-	\$128,822	\$293,414	\$0	\$67,824	\$602	50,944
76	\$5,821	\$0	-	\$37,128	\$142,256	\$12,671	\$116,280	\$541	17,088
77	\$3,980	\$0	-	\$0	\$174,096	\$0	\$107,570	\$537	17,156
78	\$5,184	\$0	-	\$35,392	\$78,720	\$0	\$47,040	\$536	19,400
79	\$734	\$41,472	-	\$0	\$0	\$0	\$94,080	\$557	20,408
80	\$75,509	\$473,444	-	\$1,866,147	\$2,295,305	\$0	\$1,120,345	\$593	25,659
81	\$8,157	\$79,618	-	\$94,802	\$277,020	\$0	\$112,347	\$586	25,677
82	\$2,511	\$0	-	\$55,986	\$297,972	\$0	\$129,270	\$570	27,480
83	\$4,620	\$0	-	\$47,600	\$241,440	\$0	\$49,800	\$572	10,013
84	\$17,040	\$0	-	\$274,151	\$207,662	\$58,126	\$117,990	\$574	21,792
85	\$12,630	\$117,532	-	\$957,290	\$507,845	\$0	\$349,747	\$619	28,849
86	\$640	\$0	-	\$176,792	\$324,720	\$0	\$128,740	\$598	25,744
87	\$3,080	\$68,800	-	\$210,467	\$533,200	\$0	\$229,667	\$595	35,104
88	\$1,755	\$152,100	-	\$295,181	\$0	\$26,142	\$50,578	\$687	19,613
89	\$3,754	\$46,240	-	\$0	\$86,904	\$89,284	\$66,300	\$588	29,272
90	\$2,964	\$370,600	-	\$307,169	\$0	\$0	\$49,406	\$715	60,037
91	\$162	\$14,256	-	\$12,054	\$0	\$9,360	\$8,970	\$654	22,820
92	\$463	\$190,950	-	\$107,231	\$0	\$62,136	\$68,578	\$684	33,038
93	\$2,869	\$408,000	-	\$275,931	\$0	\$0	\$29,219	\$729	28,875
94	\$2,100	\$117,600	-	\$260,925	\$123,900	\$102,375	\$142,625	\$634	42,250
95	\$1,634	\$0	-	\$53,230	\$43,654	\$0	\$30,746	\$584	22,118
96	\$8,319	\$163,125	-	\$639,450	\$544,838	\$0	\$246,727	\$622	29,591
97	\$16,883	\$163,875	-	\$261,122	\$161,719	\$91,102	\$95,414	\$612	18,709
98	\$972	\$86,335	-	\$22,429	\$20,387	\$2,632	\$6,250	\$706	28,138
99	\$756	\$66,528	-	\$56,252	\$0	\$43,680	\$41,860	\$654	22,820
100	\$410	\$156,864	-	\$35,644	\$0	\$0	\$99,940	\$651	23,664
101	\$1,411	\$0	-	\$73,696	\$135,072	\$18,200	\$17,360	\$610	14,376
102	\$2,104	\$209,000	-	\$353,238	\$0	\$401,294	\$158,125	\$656	38,944
103	\$750	\$0	-	\$0	\$49,200	\$42,900	\$14,000	\$590	6,033
104	\$1,817	\$205,275	-	\$30,122	\$61,200	\$92,198	\$54,453	\$670	39,088
106	\$4,148	\$261,100	-	\$0	\$0	\$0	\$129,500	\$644	21,894
107	\$6,775	\$199,904	-	\$288,287	\$285,418	\$0	\$364,176	\$599	22,482
108	\$2,599	\$160,200	-	\$0	\$152,550	\$0	\$23,063	\$653	28,775
110	\$1,966	\$18,304	-	\$209,179	\$14,352	\$79,993	\$46,627	\$644	22,117
111	\$9,498	\$0	-	\$170,262	\$298,827	\$59,870	\$68,943	\$587	22,012
113	\$16,823	\$148,734	-	\$130,849	\$341,925	\$358,597	\$399,115	\$581	24,792
114	\$6,182	\$118,272	-	\$47,488	\$40,320	\$159,744	\$139,520	\$603	17,685
115	\$2,690	\$0	-	\$53,732	\$155,496	\$0	\$115,520	\$560	15,392
116	\$15,150	\$115,200	-	\$167,300	\$271,200	\$455,000	\$195,000	\$602	20,260
117	\$3,861	\$0	-	\$0	\$101,520	\$257,400	\$284,850	\$558	25,792
118	\$2,175	\$16,800	-	\$25,200	\$28,920	\$49,400	\$49,500	\$584	18,419
119	\$300	\$20,000	-	\$0	\$0	\$26,000	\$16,500	\$628	20,000
121	\$832	\$0	-	\$0	\$0	\$43,992	\$77,940	\$536	25,456
122	\$1,840	\$480,853	-	\$94,883	\$0	\$164,649	\$150,267	\$685	28,320
123	\$6,000	\$60,000	-	\$0	\$75,000	\$65,000	\$197,500	\$549	15,000
126	\$5,611	\$482,680	-	\$192,923	\$57,604	\$287,274	\$277,673	\$649	26,443
127	\$7,909	\$0	-	\$120,531	\$143,925	\$342,713	\$235,125	\$581	25,654

SHUYAK ISLAND FINAL HARVEST PLAN							
Type	Harvest Piece Size by Sort (board feet)						All Sorts
	1	2	4	5	6	7	
3	70	662	225	1,049	-	58	131
5	121	965	391	309	-	76	233
6	201	-	245	440	-	66	157
7	77	-	-	411	-	77	118
8	87	336	879	-	-	77	177
8	15	-	-	-	-	65	49
10	35	-	168	188	-	-	158
11	86	279	202	-	-	123	199
12	44	-	291	-	180	97	146
13	51	254	280	295	112	92	129
14	29	437	321	-	-	72	170
15	35	-	168	188	-	-	158
16	26	281	245	-	103	55	90
17	54	402	389	347	135	188	239
18	29	437	321	-	-	72	170
19	45	364	-	175	-	103	180
20	53	623	205	378	81	66	163
21	39	-	149	555	91	81	119
22	46	148	227	313	64	81	129
23	189	316	484	316	-	55	308
24	87	336	879	-	-	77	177
25	35	216	229	177	-	66	115
26	16	274	164	225	-	66	101
27	58	-	-	-	-	59	59
29	49	435	246	360	135	54	155
30	54	402	389	347	135	188	239
31	64	408	382	415	48	83	239
33	70	427	-	432	-	68	189
34	51	-	242	225	-	56	160
35	70	427	-	432	-	68	189
36	85	390	208	240	90	97	128
37	85	166	283	298	65	96	156
38	21	-	195	-	69	76	81
39	27	336	360	162	-	86	154
40	54	-	549	178	-	88	196
41	10	-	541	663	-	128	266
42	188	-	606	438	-	146	376
43	188	-	606	438	-	146	376
44	51	-	167	282	66	89	116
45	22	-	352	249	82	54	131
46	107	-	449	1,009	-	116	320
47	107	-	449	1,009	-	116	320
48	120	1,015	828	412	-	85	242
49	24	-	135	393	-	107	262
50	92	-	501	430	-	125	297
51	68	-	-	579	-	140	172
54	65	166	313	267	-	88	159
55	26	-	-	494	-	70	142
56	31	-	250	221	-	99	108
57	64	-	396	280	-	82	141
58	68	-	-	579	-	140	216
59	15	-	-	398	-	91	126
60	31	-	201	445	-	71	109
61	22	-	352	249	82	54	131
62	19	-	180	426	-	88	162
63	53	559	278	309	173	80	152
64	65	-	302	325	-	75	159

SHUYAK ISLAND FINAL HARVEST PLAN							
Type	Harvest Piece Size by Sort (board feet)						
	1	2	4	5	6	7	All Sorts
128	38	-	269	310	119	67	141
129	40	-	211	601	116	70	98
137	27	-	263	269	-	81	117
139	37	348	293	278	114	75	108
140	29	238	205	209	69	62	112
141	34	-	145	-	118	-	102
142	52	-	461	348	-	66	149
143	28	-	171	-	93	75	81
144	22	223	231	-	77	67	80
145	29	275	225	172	115	66	105
146	45	-	173	-	76	70	76
147	27	264	306	401	-	68	154
148	42	250	221	284	129	96	120
151	52	339	254	252	134	73	125
152	24	225	240	170	92	71	97
153	26	-	-	193	-	63	86
158	30	231	283	181	112	68	122
159	41	-	-	194	-	68	91
160	40	-	246	285	101	80	121
162	15	556	261	333	133	58	152
163	26	513	295	-	133	85	124
164	23	-	-	-	143	80	116
165	20	308	512	-	87	56	147
166	19	-	-	346	84	70	112
168	30	367	223	-	-	70	82
169	35	383	285	-	118	70	90
170	27	408	255	301	138	75	105
171	35	-	216	217	108	75	97
174	38	-	-	265	121	75	109
175	25	-	248	253	100	80	113
180	40	-	-	236	-	100	118
182	74	-	-	459	-	105	145
184	40	-	211	-	110	100	101
185	40	-	-	250	-	120	155
204	40	-	-	297	114	100	146
205	50	233	218	257	135	89	138
211	42	-	244	240	-	93	134
212	41	173	249	194	101	100	119
214	45	387	253	261	123	83	117
218	39	-	183	214	-	-	145
229	48	185	236	-	-	100	297
255	60	431	542	396	113	70	172
256	40	213	264	248	87	80	94
257	46	-	284	244	160	85	175
265	27	215	173	-	145	56	112
284	39	-	183	214	-	-	145
120A	18	-	-	-	112	59	65
120B	14	-	-	333	103	65	77
124A	30	-	181	-	127	70	83
124B	23	-	-	221	-	113	111
124C	30	-	-	300	-	78	96
TOTALS	45	335	299	309	113	81	141

APPENDIX E

Production Cost Appraisal Worksheets

A. Road Construction Cost Appraisal Assumptions

1. Road lengths determined by plotting trial grades on topographic and type maps, from aerial photos and aerial reconnaissance.

2. Spacing of landings and turnouts: Landings 1000'; turnouts 700' (assumed will be intervisible).

3. Culverts spaced at 500' with the following breakdown:

18" CMP	30%
24" CMP	50%
48" CMP	15%
96" CMP	4%
Bridges	<u>1%</u> (log stringer type)
	100%

4. Road fabric needed for 20% of construction.

5. Road ballast quantities assume 1/3 derived from road cut in-place.

6. Road standard: 16' subgrade with 2' ditch, 14' R/S with turnouts. 50' Right of way average.

7. Daily subgrade construction @ 3 stations/day using 4 construction sides: 6-day week, 9-hour day, 170 days annually = 2,040 stations/yr.

8. Typical road construction side:

Excavator (235 type) @	\$143.75/hr (with operator and O.H.)
D8-9 Cat	\$115.00
4 dump trucks (57.50/hr ea.)	\$230.00
Track Drill & Compressor	\$ 80.00
Grader @	\$ 74.75

9. Subgrade Cost:

@ 3 stations/day	Exc.	=	\$143.75
	D-8	=	\$115.00
	Drill	=	<u>\$ 80.00</u>
			\$338.75/hr x 9 = \$3,048.75/day
		=	\$1,016.25/stations.

10. Move-in Cost/side = \$23,400 x 2 = \$46,800 based on 26-hr tow one-way with tug and barge -- 350-mile range.

11. Right of way logging:

Yarding	\$ 25.67 (12 lds/day @ 4.8 mbf/load)
Falling	\$ 32.00
Loading	<u>\$ 25.67</u> (12 lds/day @ 4.8 mbf/load)
	\$ 83.34
	+ \$ 34.10 Haul
Total Cost	\$117.44

12. Culvert costs, fabric, bridge costs per USFS construction manual - Alaska Region.

13. Clear and grub cost assumes 1 acre per day with excavator @ \$143.75/hr.

14. Road construction to be performed season prior logging, after operations have begun in 1996.

15. Right of way volume taken from total volume available for shovel logging (calculated as follows):

$$[[[50' \text{ Right of way} \times \text{total length}] / 43,560] \times \text{ave vol/ac}](2/3)$$

2/3 factor assumes road crosses areas of non-merch volume or no volume.

B. Shovel Logging Cost Appraisal Assumptions

1. Work period: 170-day season, 6-day week, 9-hour day.

2. 2-shovel sides yarding 806 MBF/wk; 32 ld/day @ 4.8mbf/load.

Typical side: 1 shovel (235 type)
 1 Hitrac grapple cat
 1 loader (235 type)

3. Cost inclusive stump to truck @ sort yard.

4. Move-in costs assume 2-way travel from Anchorage or other port of similar distance.

5. Shovel ground to be partial cut. Only marketable volume + 20% domestic quality to be removed.

6. Logging Production breakdown:

Shovel/Tractor	98% (includes right of way & yd vol of 6,985 mbf)
Helicopter	2%

C. Helicopter Logging Cost Appraisal Assumptions

1. Work period: 1 season; 7-hr days @ 51 MBF/day prod.

2. Helicopter volume flown to landings and trucked to sort yard/LTF.
Helicopter volume flown to water would be bag boomed and towed to the LTF, where it would be removed, remanned, and sorted.

3. Helicopter sides are partial cuts that would remove high grade material only, with no more than 5 percent of the total volume to be domestic.

4. Wood weight derived from "Conversion Factors for the Pacific Northwest Forest Industry" by College of Forest Resources, University of Washington, 1981.

5. Yarding distances and elevations determined from USGS quad map used to plot road locations.

6. Volumes and defect % derived from inventory cruise data.

D. Sort Yard, LTF, Dump & Tow Cost Appraisal Assumptions

1. Work period: 170 days annually, 6-day week, 9-hour day.
2. LTF design and construction included in cost of yard operations.
3. Yard costs amortized over all volume produced from all sources.
4. All volume produced (except sort yard right of way volume and helicopter volume brought in by bag boom) will be delivered by truck to yard.
5. LTF location assumed to be acceptable, no on-site inspections made. Location determined from USGS quad maps, ownership and type maps, aerial photos and chart #16604.
6. Logs to be sorted and stored in dry-land sort and dumped and rafted shortly before loading shipside in water or as yard space dictates.
7. Ship to self-anchor while loading logs.

E. General Assumptions

1. Each phase of operations treated as separate cost center:
 - a. Road construction
 - b. Logging: conventional, helicopter, and right of way.
 - c. Sort yard: sort, reman, boom, raft
 - d. Camp
 - e. Administration and Marketing
2. Single contractor to handle and oversee operations including helicopter logging but not administration, marketing and support costs.
3. All equipment appraised as new.
4. Access to Section 30,T19S,R20W via constructed road assumed possible.

ROAD CONSTRUCTION
COST APPRAISAL

SHUYAK ISLAND ROADS

LOCATION:

REFER TO REP
T18, 19 & 20
R19 & 20WNO. ST 5,596 (106 miles)
PROJE 84-008
11-9-1994LOC E. HALLER
DES XXXXXXXXXXXX
APP E. HALLERSCHEDULE 1.
COST APPRAISAL PARAMETERS

A. MOVE-IN/OUT(\$)	46800	H. SUBGRADE REINFORCING FABRIC(\$	400
B. CLEAR AND GRUB(\$/ACRE)	1290	I. PIT DEVELOPEMENT & BALLAST	
C. EXCAVATION(\$/CUBIC YARD)		a. HAUL COST	
COMMON	1.75	1 MILE HAUL(\$/CUBIC YARD	7.67 (4 TRUCKS)
UNCLASSIFIED	1.95	ADDITIONAL MILES(\$/CUBIC	0.6
ROCK	4.1	b. YARDAGE NEEDED	
END-DRILLED ROCK	6	SURFACING(CUBIC YARDS/ST	67
PER STATION BASIS (\$/STATION)		LANDINGS(CUBIC YARDS/LAN	125
EXISTING GRADE	350	TURNOUTS(CUBIC YARDS/TUR	22
NEW CONSTRUCTI	1016.25	J. RIP RAP PLACEMENT	
D. ENDHAUL(\$/CUBIC YARD/MILE)	2.73	a. HAUL COST	
E. LANDING CONSTRUCTION(\$/LAN	1300	1 MILE HAUL(\$/CUBIC YARD	9.29
F. SUBGRADE COMPACTION(\$/STAT	50	ADDITIONAL MILES(\$/CUBIC	0.6
G. CULVERT INSTALLATION(\$/FOOT)		K. IMPORTED FILL (ROCK)	
15	15	a. HAUL COST	
18	16	1 MILE HAUL(\$/CUBIC YAR	7.67
24	16	ADDITIONAL MILES(\$/CUBI	0.6
30	16	L. GRIDROLL BALLAST(\$/STATION)	24
36	14	M. FINISH DITCHING AND GRADING(\$	25
48	14	N. RIGHT-OF-WAY LOGGING(\$/MBF ON-BOARD TRUCK)	
60	12	a. CONIFER	117
72	12	b. HARDWOOD	0
84	12	O. LOG STRINGER BRIDGE (\$/LIN. F	135
96	12		
DNSPT			
18	16		
24	16		

SCHEDULE 2.
CONSTRUCTION APPRAISAL

ITEM	AMOUNT	COST(\$)
MOVE-IN/OUT(1 EACH SIDE) - 4	4	\$187,200.00
CLEAR AND GRUB(ACRES)	640.0	825600
EXCAVATION(CUBIC YARDS)		
COMMON	0	0
UNCLASSIFIED	0	0
ROCK	0	0
END DRILLED ROCK	0	0
GRADE IMPROVEMENT (#STAT	0	0
NEW CONSTRUCTION (#STATI	5596	5686935
ENDHAUL(CUBIC YARD-MILES)	0.0	0
LANDING CONSTRUCTION(# TO BUI	559	726700
SUBGRADE COMPACTION(STATIONS)	0.00	0
CULVERT INSTALLATION(FEET)		1904000
CMP	15	0
	18	10700
	24	20100
	30	0
	36	0
	48	8300
	60	0
	72	0
	84	0
	96	2200
DOWNSPOUTS		
	18	1660
	24	275
LOG STRINGER BRIDGE CONSTRU	625	84375
SUBGRADE REINFORCING FABRIC	1000.0	400000
PIT DEVELOPEMENT & BALLAST		3505995.35
AVERAGE HAUL(MILES)	1.0	
STATIONS TO BALLAST	5596.00	
# LANDINGS	559	
# TURNOUTS	559	
RIP RAP PLACEMENT		0
AVERAGE HAUL(MILES)	0.0	
RIP RAP NEEDED(CUBIC YAR	0	
IMPORTED FILL (ROCK)		42921.32
AVERAGE HAUL (MILES)	1.0	
FILL NEEDED (CUBIC YARDS	5596	
GRIDROLL BALLAST(STATIONS)	5596.00	134304
FINISH DITCHING & GRADING(STA	5596.00	139900
TOTAL CONST.		\$13,637,930.67
COST PER MIL		\$128,678.12

SCHEDULE 3.
RIGHT-OF-WAY LOGGING COST

SPECIES TYPE	VOLUME MBF	COST
CONIFER	6900	\$807,300.00
HARDWOOD	0	0
TOTALS		\$807,300.00

COST APPRAISAL - SHOVEL/GRAPPLE CAT

SALE NAME	SHUYAK	TOTAL SALE VOL:		206577 MBF	
LOADS/DAY	#PCS/LD	#PCS/DAY	VOL/PC	VOL/LD	VOL/DAY
23.50	34.0	800	141	4.8	112.8
LOGGING COST				COST/DAY	COST/M @
YARDING (2 SHOVELS/2 GRAPPLE CATS)				\$4,837.68	\$42.89
LOADING (2 LOADERS)				\$2,451.09	\$21.73
TRUCKING (8 LOGTRUCKS)				\$4,211.52	\$37.34
DOZERS (LANDING/ SPUR CONST.)				\$2,045.21	\$18.13
GRADER				\$770.53	\$6.83
CREW TRANSPORTION and EQUIPMENT (2 CREWS)				\$392.69	\$3.48
SUPERVISION and OFFICE O.H.				\$1,829.40	\$16.22
FIRE PROTECTION				\$41.53	\$0.37
MOVE-IN (2 MOVES; 1 EQUIPMENT, 1 TRUCKS AND SUPPORT)					\$0.46
CUTTING					\$35.00
SUBTOTAL					\$182.44
TOTAL DEL. COST TO YARD				*****	\$182.44
YARDING				COST/DAY	
(1.)	SHOVEL AND GRAPPLE CA 235/D5 HI-TR				
CAPITAL COST:		\$1,400,000			
A. DEPRECIATION:					
7 YR. LIFE		170 (days annual use)			
RESIDUAL PRICE @		0.15 % =		\$210,000	
NET VALUE =		\$1,190,000			
DEPRECIATION PERIOD(days)=		1190		\$1,000.00	
B. INTEREST:					
13% ON AVERAGE INVESTMENT(a.i.)					
CAPITOL COST =		\$1,400,000		\$535.29	
C. INSURANCE and TAXES: @		5% a.i.		\$205.88	
D. REPAIRS:		50% OF DEPRECIATION		\$500.00	
E. FUEL,LUBE:					
(FUEL)	252 gal/day	\$2.50 cost/gal=		\$630.00	

COST APPRAISAL - SHOVEL/GRAPPLE CAT

(OIL&LUBE)	\$63.00	cost/day =	\$63.00	\$693.00
------------	---------	------------	---------	----------

F. WIRE ROPE:

CHOKERS/DAY	2			
0	\$85.00	cost	\$170.00	
HARDWARE (est./day)			\$100.00	
				\$270.00

G. LABOR:

YARDING ENGINEER (4)		per.hr.		
CHASER (2)		\$80.00		
0 CHOKERME	\$13.00	per.hr.	\$30.00	
HOOKER (0)		\$0.00	\$0.00	
(hr./day)	9	TOTAL	\$110.00	\$990.00

H. OVERHEAD:

65% of labor				
(insurance, taxes, social security)				\$643.50

TOTAL YARDING COST/DAY	\$4,837.68
------------------------	------------

LOADING

COST/DAY

(2)	LOADER TYPE:	CAT 235 (2)		
-----	--------------	-------------	--	--

CAPITAL COST:	\$700,000
---------------	-----------

A. DEPRECIATION:

5 YR. LIFE	170 (days annual use)		
RESIDUAL PRICE @	0.15 %	=	\$105,000
NET VALUE =	\$595,000		
DEPRECIATION PERIOD(days) =	850		\$700.00

B. INTEREST:

13% ON AVERAGE INVESTMENT(a.i.)			
CAPITOL COST =	\$700,000		\$267.65

C. INSURANCE and TAXES: @	5% a.i.		\$102.94
---------------------------	---------	--	----------

D. REPAIRS:	50% OF DEPRECIATION		\$350.00
-------------	---------------------	--	----------

E. FUEL,LUBE:

(FUEL)	162 gal/day	\$2.50 cost/gal =	\$405.00	
(OIL&LUBE)		\$31.50 cost/day =	\$31.50	\$436.50

F. LABOR:

OPERATORS (2)	\$40.00 per/hr.	9 hr./day		
	65% overhead			\$594.00

TOTAL LOADING COST/DAY	\$2,451.09
------------------------	------------

COST APPRAISAL - SHOVEL/GRAPPLE CAT

TRUCKINGCOST/DAY

(3.)	TRUCK TYPE:	PETERBILT (8)			
	CAPITAL COST:	\$640,000			
	A. DEPRECIATION:				
		5 YR. LIFE	170 (days annual use)		
	RESIDUAL PRICE @	0.15 %	=	\$96,000	
	NET VALUE =			\$544,000	
	DEPRECIATION PERIOD(days) =		850		\$640.00
	B. INTEREST:				
		13% ON AVERAGE INVESTMENT(a.i.)			
	CAPITOL COST =			\$640,000	\$244.71
	C. INSURANCE and TAXES: @	5% a.i.			\$94.12
	D. REPAIRS:	25% OF DEPRECIATION			\$160.00
	E. FUEL,LUBE:				
	(FUEL)	400 gal/day	\$2.50 cost/gal =	\$1,000.00	
	(OIL&LUBE)		\$112.50 cost/day =	\$112.50	\$1,112.50
	F. LABOR:				
	OPERATORS (7)	\$132.00 per/hr.	9 hr./day		
		65% overhead			\$1,960.20
				TOTAL TRUCKING COST/DAY	\$4,211.52

DOZERSCOST/DAY

(4.)	DOZER TYPE:	D-8 CAT (2)			
	CAPITAL COST:	\$500,000			
	A. DEPRECIATION:				
		5 YR. LIFE	170 (days annual use)		
	RESIDUAL PRICE @	0.15 %	=	\$75,000	
	NET VALUE =			\$425,000	
	DEPRECIATION PERIOD(days) =		850		\$500.00
	B. INTEREST:				
		13% ON AVERAGE INVESTMENT(a.i.)			
	CAPITOL COST =			\$500,000	\$191.18
	C. INSURANCE and TAXES: @	5% a.i.			\$73.53
	D. REPAIRS:	50% OF DEPRECIATION			\$250.00

COST APPRAISAL - SHOVEL/GRAPPLE CAT

MISC. EQUIPMENT & CREW TRANSPORTATION:

COST/DAY

(6.)	A. FUEL TRUCK (1500 GAL.)				
1.	DEPRECIATION	(-)	\$5,000 est. cost		
			\$1,500 salvage value		
			\$3,500 /7 yr. life		
			\$500.00 depr./yr		
			170 days use/yr		\$2.94
2.	INTEREST	13% (a. i.)			\$1.91
3.	INSURANCE & TAXES		5% (a. i.)		\$0.74
4.	FUEL,OIL,MAINT.(est)		\$8,500 /yr		\$50.00
	B. EQUIPMENT MAINTENANCE TRUCK				
1.	DEPRECIATION	(-)	\$25,000 est. cost		
			\$7,500 salvage value		
			\$17,500 /7 yr. life		
			\$2,500.00 depr./yr		
			170 days use/yr		\$14.71
2.	INTEREST	13% (a. i.)			\$9.56
3.	INSURANCE & TAXES		15% (a. i.)		\$11.03
4.	FUEL,OIL,MAINT.(est)		\$8,500 /yr		\$50.00
	C. CREW , SIDE ROD AND SUPERV. CRUMMIES (7)				
1.	DEPRECIATION	(-)	\$90,000 est. cost		
			\$37,800 salvage value		
			\$52,200 /7 yr. life		
			\$7,457.14 depr./yr		
			170 days use/yr		\$43.87
2.	INTEREST	13% (a. i.)			\$34.41
3.	INSURANCE & TAXES		5% (a. i.)		\$13.24
4.	FUEL,OIL,MAINT.(est)		\$21,250 /yr		\$125.00
	F. SAWS (chasing,incl. maint.)				
			8 saws/yr		
			\$750.00 cost/saw		\$35.29
			TOTAL MISC. COST/DAY		\$392.69

SUPERVISION & OFFICE O.H.(per day):

COST/DAY

(7.)	A. SUPERVISOR,SALARY & BENIFITS				\$225.00
	B. OFFICE EXPENSE				\$60.00
	C. MSCL LABOR COSTS				
	Maintenance Crew Foreman		\$20.00		
	Maintenance crew laborers (3)		\$45.00		
	Misc. labor (3)		\$39.00		
	TOTAL		\$104.00		
	OVERHEAD @	0.65		9 hr/day	\$1,544.40
			TOTAL COST/DAY		\$1,829.40

COST APPRAISAL - SHOVEL/GRAPPLE CAT

FIRE PROTECTION:COST/DAY

(8.)	A. WATCHMAN	\$0 cost/mo. 0 months	\$0.00
	B. WATER TRUCK (3)		
1.	DEPRECIATION (-)	\$24,000 est. cost \$7,200 salvage value \$16,800 /7 yr. life \$2,400.00 depr./yr 170 days use/yr	\$14.12
2.	INTEREST 13% (a. i.)		\$9.18
3.	INSURANCE & TAXES 5% (a. i.)		\$3.53
4.	FUEL,OIL,MAINT.(est)	\$1,500 /yr	\$8.82
	C. PUMP CANS,FIRE HOSE,FIRE BOXMAINT. & OTHER MISC.	\$1,000 total cost/yr.	\$5.88

TOTAL COST/DAY

\$41.53

MOVE-IN:COST

(9.)	TOWERS (breakdown)		
	TUG AND BARGE	104 hrs.	
	(from Anchorage-Towers and truc	\$450 cost/hr.	\$46,800.00
	(permits)	\$500	\$1,000.00
	B. LOADE (load & unload)		
	TUG AND BARGE	104 hrs. (SEE ABOVE)	
	(Loaders, cats, grader and mscl.)	\$450 cost/hr.	\$46,800.00
	(permits)	\$500	\$500.00
	TOTAL COST		\$95,100.00
	TOTAL COST/MBF		\$0.46

CUTTING:COST

(14.)	LABOR INCLUDING OVERHEAD	TOTAL COST TOTAL COST/MBF	\$7,230,195 \$35.00
-------	--------------------------	------------------------------	------------------------

COST APPRAISAL - YARD AND DUMP

SALE NAME	SHUYAK ISLAND	TOTAL SALE VOL:	216309	MBF	
LOADS/DAY	#PCS/LD	#PCS/DAY	VOL/PC	VOL/LD	VOL/
26.44	34.0	900	141	4.8	126.9
LOGGING COST			COST/DAY	COST	126.9 M/DA
SORTING (1 SHOVEL)			\$2,093.29		\$16.50
LOADING/UNLOADING (1 LOADER-FRONT-END)			\$1,205.82		\$9.50
BOOM CRANE (1)			\$1,540.24		\$12.14
LOG BRONC (2)			\$1,208.41		\$9.52
CREW TRANSPORTION			\$17.65		\$0.14
SUPERVISION and OFFICE O.H.			\$285.00		\$2.25
FIRE PROTECTION			\$0.00		\$0.00
MOVE-IN					\$0.22
YARD CONSTRUCTION					\$1.52
LTF/BOOM CONSTRUCTION					\$1.34
RAFT TOWING & STORAGE					\$3.39
YARD MAINTENANCE					\$2.25
		TOTAL DE	COST TO SHIP		\$58.77 (FAS)

SORTING				COST/DAY
(1.)	SHOVEL	CAT 235		
	CAPITAL COST:	\$350,000		
	A. DEPRECIATION:			
		7 YR. LIFE	170 (days annual use)	
	RESIDUAL PRICE @	0.15 %	=	\$52,500
	NET VALUE =			\$297,500
	DEPRECIATION PERIOD(days) =		1190	\$250.00
	B. INTEREST:			
		13% ON AVERAGE INVESTMENT(ai)		
	CAPITOL COST =		\$350,000	\$133.82
	C. INSURANCE and TAXES: @	5% ai		\$51.47
	D. REPAIRS:	50% OF DEPRECIATION		\$125.00
	E. FUEL,LUBE:			

COST APPRAISAL - YARD AND DUMP

SALE NAME	SHUYAK ISLAND	TOTAL SALE VOL:	216309	MBF
(FUEL)	90 gal/day	\$2.50 cost/gal =	\$225.00	
(OIL&LUBE)		\$120.00 cost/day =	\$120.00	\$345.00
G. LABOR:				
	SHOVEL OPERATOR		per.hr.	
	REBUCK MEN (2)		\$20.00	
	0 MSCL LABOR	\$13.00 per.hr.	\$26.00	
	SCALERS (2)		\$0.00	
	(hr./day)	9	\$34.00	
		TOTAL	\$80.00	\$720.00
H. OVERHEAD:	65% of labor			
(insurance, taxes, social security)				\$468.00
		TOTAL SORTING COST/DAY		\$2,093.29

LOADING/UNLOADING

COST/DAY

(2.)	LOADER TYPE:	CAT 988B (1)		
	CAPITAL COST:	\$300,000		
	A. DEPRECIATION:			
		5 YR. LIFE	170 (days annual use)	
	RESIDUAL PRICE @	0.15 %	=	\$45,000
	NET VALUE =		\$255,000	
	DEPRECIATION PERIOD(days) =		850	\$300.00
	B. INTEREST:			
		13% ON AVERAGE INVESTMENT(a.i.)		
	CAPITOL COST =		\$300,000	\$114.71
	C. INSURANCE and TAXES: @	5% a.i.		\$44.12
	D. REPAIRS:	50% OF DEPRECIATION		\$150.00
	E. FUEL,LUBE:			
	(FUEL)	100 gal/day	\$2.50 cost/gal =	\$250.00
	(OIL&LUBE)		\$50.00 cost/day =	\$50.00
				\$300.00
	F. LABOR:			
	OPERATORS (1)	\$20.00 per/hr.	9 hr./day	
		65% overhead		\$297.00
		TOTAL LOADING COST/DAY		\$1,205.82

BOOM CRANE

COST/DAY

(3.)	BOOM TYPE:	MANTOWAC
	CAPITAL COST:	\$450,000
	A. DEPRECIATION:	

COST APPRAISAL - YARD AND DUMP

SALE NAME	SHUYAK ISLAND	TOTAL SALE VOL:	216309	MBF
	5 YR. LIFE	170 (days annual use)		
	RESIDUAL PRICE @	0.15 % =	\$67,500	
	NET VALUE =	\$382,500		
	DEPRECIATION PERIOD(days)=	850		\$450.00
B. INTEREST:				
	13% ON AVERAGE INVESTMENT(a.i.)			
	CAPITOL COST =	\$450,000		\$172.06
C. INSURANCE and TAXES: @				
	5% a.i.			\$66.18
D. REPAIRS:				
	50% OF DEPRECIATION			\$225.00
E. FUEL,LUBE:				
(FUEL)	100 gal/day	\$2.50 cost/gal =	\$250.00	
(OIL&LUBE)		\$80.00 cost/day =	\$80.00	\$330.00
F. LABOR:				
	OPERATORS (1)	\$20.00 per/hr.	9 hr./day	
		65% overhead		\$297.00
	TOTAL BOOMING COST/DAY			\$1,540.24

LOG BRONCS

COST/DAY

(4.)

LOG BRONCS(2)

CAPITAL COST:	\$150,000			
A. DEPRECIATION:				
	5 YR. LIFE	170 (days annual use)		
	RESIDUAL PRICE @	0.15 % =	\$22,500	
	NET VALUE =	\$127,500		
	DEPRECIATION PERIOD(days)=	850		\$150.00
B. INTEREST:				
	13% ON AVERAGE INVESTMENT(a.i.)			
	CAPITOL COST =	\$150,000		\$57.35
C. INSURANCE and TAXES: @				
	5% a.i.			\$22.06
D. REPAIRS:				
	50% OF DEPRECIATION			\$75.00
E. FUEL,LUBE:				
(FUEL)	100 gal/day	\$2.50 cost/gal =	\$250.00	
(OIL&LUBE)		\$60.00 cost/day =	\$60.00	\$310.00
F. LABOR:				
	OPERATORS (2)	\$40.00 per/hr.	9 hr./day	
		65% overhead		\$594.00
	TOTAL OPERATING COST/DAY			\$1,208.41

COST APPRAISAL - YARD AND DUMP

SALE NAME	SHUYAK ISLAND	TOTAL SALE VOL:	216309	MBF
MISC. EQUIPMENT & CREW TRANSPORTATION:				COST/DAY
F. SAWS (chasing,incl. maint.)				
		4 saws/yr		
		\$750.00 cost/saw		\$17.65
		TOTAL MISC. COST/DAY		\$17.65
SUPERVISION & OFFICE O.H.(per day):				COST/DAY
(7.)	A. YARD MGR., SALARY & BENEFITS			\$225.00
	B. OFFICE EXPENSE			\$60.00
	OVERHEAD @	0.65	9 hr/day	\$0.00
			TOTAL COST/DAY	\$285.00
MOVE-IN:				COST
	TUG AND BARGE	104 hrs.		
	(from Anchorage-5 PIECES OF EQUIP.)	\$450 cost/hr.		\$46,800.00
	(2 pilot cars)	0 miles		
		\$0.00 cost/mi.		\$0.00
	(permits)	\$500		\$1,000.00
	(set-up)	same as breakdown		\$0.00
		TOTAL COST/MBF		\$0.22
YARD CONSTRUCTION				COST
(10.)	2 (D-8)			
	(Includes improvements for fuel storage and maintenance)	15 Acre Yard		
		2900 yds./acre		
		\$7.25 cost/yd.		\$315,375.00
	(spread,compact)	120 hrs.		
		\$115 cost/hr.cat		\$13,800.00
		TOTAL COST		\$329,175.00
		TOTAL COST/MBF		\$1.52
LTF/ BOOM CONTRUCTION				COST
(11)	PERMITS	\$2,000		
	HYDROGRAPHIC/AREA SURVEY	\$70,000		
	ENGINEERING	\$75,000		
	CRIB MATERIALS:			
	5000L.F. SHEET PILING(7 ga.)	\$30,000		
	PILE DRIVER(rental)	\$5,000		
	5000 C.Y. 2' + RIP RAP @ \$4.10/C.Y.	\$20,500		
	200 C.Y. PIT RUN @ \$4.10/C.Y.	\$820		
	BAG BOOM MATERIALS:			

COST APPRAISAL - YARD AND DUMP

SALE NAME	SHUYAK ISLAND	TOTAL SALE VOL:	216309	MBF
	3-TON CONCRETE ANCHORS @ \$.30/lb (9)	\$16,200		
	CABLE TIE DOWNS	\$3,000		
	BOOMSTICKS, DOGS, ETC.	\$9,000		
	DOCK MATERIALS	\$10,000		
	TRANSPORT MATERIALS	\$10,000		
	PLACE BAG BOOM @ 1HR- HELI & TUG	\$4,000		\$255,520.00
	(clearing,etc.)	\$5,000 cost/acre		\$10,000.00
	(move-in) COVERED IN LOGGING APP.	\$0 total cost		\$0.00
	SURFACE TURNAROUND/ BOOM AREA	2900 yds./acre		
		\$4.10 cost/yd.		\$23,780.00
		TOTAL COST		\$289,300.00
		TOTAL COST/MBF		\$1.34

RAFT TOWING AND STORAGE

(12)

A. Average raft size	250 MBF	
B. Average tow distance / raft	15 Nautical miles	
C. Hourly tug rate	450 \$/Hr.	
D. Tug towing speed	8 Knots/Hr.	
E. Average storage time/raft @ \$0.25/Mbf/day	60 Days	\$3,750.00
	TOTAL COST	\$733,792.88
	TOTAL COST/MBF	\$3.39

Unit 1

Page 1

1

* Selected *

SHUYAK ISL.

Sale

278.0

Acres

Unit Centroid: Easting

0

Northing

0

Elevation

144

Log Landing [LL]

LANDING #1

Log Landing: Easting

0

Northing

0

Elevation

44

Unit/LL Elev Change

-100

Include Service Flight Time?

N

Service Landing [SL]

Service Landing: Easting

0

Northing

0

Elevation

0

AIRCRAFT

Bell 214

Design Load

6400

Mean Flight Path Length

1904

LL to SL Flight Path Length

0

SL to Unit Flight Path Length

0

STAND

Summary

Stand Data File

%Remaining Canopy Closure

40

Gross Scale MBF/acre

15.76

Scaling Defect%

8

Net Scale MBF/acre

14.50

Yard Unmerchantable Material?

N

Add Weight% for Intended UM

0

Add Wt% for Unintended UM

15

Pounds/Gross BF

6.46

Experienced Ave Scaling Defect%

0

Total Weight to yard lbs/acre

119776

Includes UM Weight lbs/acre

17966

% of Butt Logs to be Ripped

0

* Selected *

WOOD AVAILABILITY		
Cut Trees/acre		93
Cut Logs/acre		93
Tree Avg Gross Scale BF		169
Log Avg Gross Scale BF		169
Ave tree weight		1288
Ave log weight		1288
Ave number of UM pieces/acre		0
Ave UM piece weight		0
Mean Target Load		6337
Plausibility Test Trees/Turn	1.97 -	1.97
Plausibility Test Logs/Turn	1.97 -	1.97
Average Available Load	2535 -	2535
Load Factor	0.40 -	0.40
PRODUCTION RATE		
Avg Residual Tree Height		46.00
Additional Turn Time		0.50
Mean Min/Turn		2.51
Mean Turns/Effective Hour		23.95
Effective Yarding Hours/Day		7.00
Yarding Workdays	78.36 -	78.36
Board Foot/Cubic Foot Ratio		1.00
Production Rate Gross MBF/Day	55.9 -	55.9
Production Rate Net MBF/Day	51.4 -	51.4
PRODUCTION COST		
Total Payunits: NetMerch MBF		4030.78
Pounds/Net BF		7.02
Aircraft Fixed \$/Day		4300
Aircraft Variable \$/Day		3570
Yarding System \$/Day		7870
Aux Support Aircraft \$/Day	0 -	0
Sawyers	3 -	3
Rigging and Landing Crew	6 -	7
Loaders with Operators	1 -	2
Additional Ripping \$/Day	0 -	0
Support System \$/Day	4988 -	6527
Ground Support Fixed \$/Day		540
Production Cost \$/Net MBF	260 -	290

Summary for Sale: SHUYAK ISL.

Unit	Alt	Acres	Landing	AYD	Net MBF/Day	Work Days	NetMBF	NetCost/MBF	Mean Load	Aircraft
1	1	278	LANDING #1	1904	51.4 - 51.4	78.4 - 78.4	4030.8	260 - 290	2535 - 2535	Bell 214
COUNT		TOTAL		MEAN	MEAN	TOTAL	TOTAL	MEAN	MEAN	
1		278		1904	51.4 - 51.4	78.4 - 78.4	4030.8	260 - 290	2535 - 2535	

Cost Recapitulation

	----- Extended Cost -----	--- Cost/Net MBF ---
Yarding	757787.62 774244.25	188.00 192.08
Falling	188075.52 188075.52	46.66 46.66
Loading	104107.63 208215.27	25.83 51.66
Landings	0.00 0.00	0.00 0.00
Aircraft MoveIn/Out	6850.00 13190.00	1.70 3.27
Ground MoveIn/Out	331.25 438.00	0.08 0.11
Special Costs	0.00 0.00	0.00 0.00
TOTAL	1057152.00 1184163.00	262.27 293.78

COMPARABLE LAND SALE NO. 1

DATE OF SALE: 9-25-87 **SIZE (ACRE):** 159.99 **PRICE/ACRE:** \$934 **RECORD NO.:** 1

STATE: Alaska **RECORDING DISTRICT:** Haines **USGS QUAD MAP NO.:** Juneau C-4, C-5
REGION: Southeastern **SUB-REGION:** Haines
COMMUNITY/NEIGHBORHOOD: William Henry Bay
LOCATION: William Henry Bay, West side of Lynn Canal, about 35 miles north of the Juneau Airport and 35 miles south of Haines, Alaska
LEGAL DESCRIPTION: USS 1212

RIGHTS CONVEYED: Fee simple except for oil and gas
GRANTOR: Forest Fuhr
GRANTEE: William Henry Bay Corporation
TAX ID: B-WHB-USS1212 **INSTRUMENT:** Land Contract **BOOK/PAGE:** 292/0889 **RECD'G DATE:** 10-21-87

SALES PRICE: \$149,500 **TERMS:** \$135,500 D/T, \$2,000 per month, 10% interest, balance 9-15-94
CEV/ADJ. PRICE: \$149,500 **BASIS FOR ADJUSTMENT:** None - short term note.

CONFIRMED WITH: Dan Turner, Haines Assessor
Charles Horan, MAI Comparable Data Sheet
BY/ DATE: DLP/1-94
DLP/2-94

PRESENT USE: Vacant **INTENDED USE:** Recreation Subdivision/Lodge
IMPROVEMENTS: None **HIGHEST & BEST USE:** Recreation
LEGAL ACCESS: Yes **TOPOGRAPHY:** Hilly
PHYSICAL ACCESS: Boat, float plane **SITE SHAPE:** Irregular
ROAD IMPROVEMENTS: None **SOILS:** Good, well draining gravels and sand
UTILITIES: None **EASEMENTS:** Normal
ZONING: None **WATERFRONT:** Ocean-1,799', Beardslee R.-5,000'
VEGETATION: Forested, 60-70% flat river bottom rising steeply on east, west and south.

MARKET EXPOSURE: Unknown

SUPPLY & DEMAND CHARACTERISTICS: There is a limited market for large acreage tracts of land similar to the subject in the Haines area.

BASIS FOR PURCHASE PRICE: Unknown believed to have been negotiated.

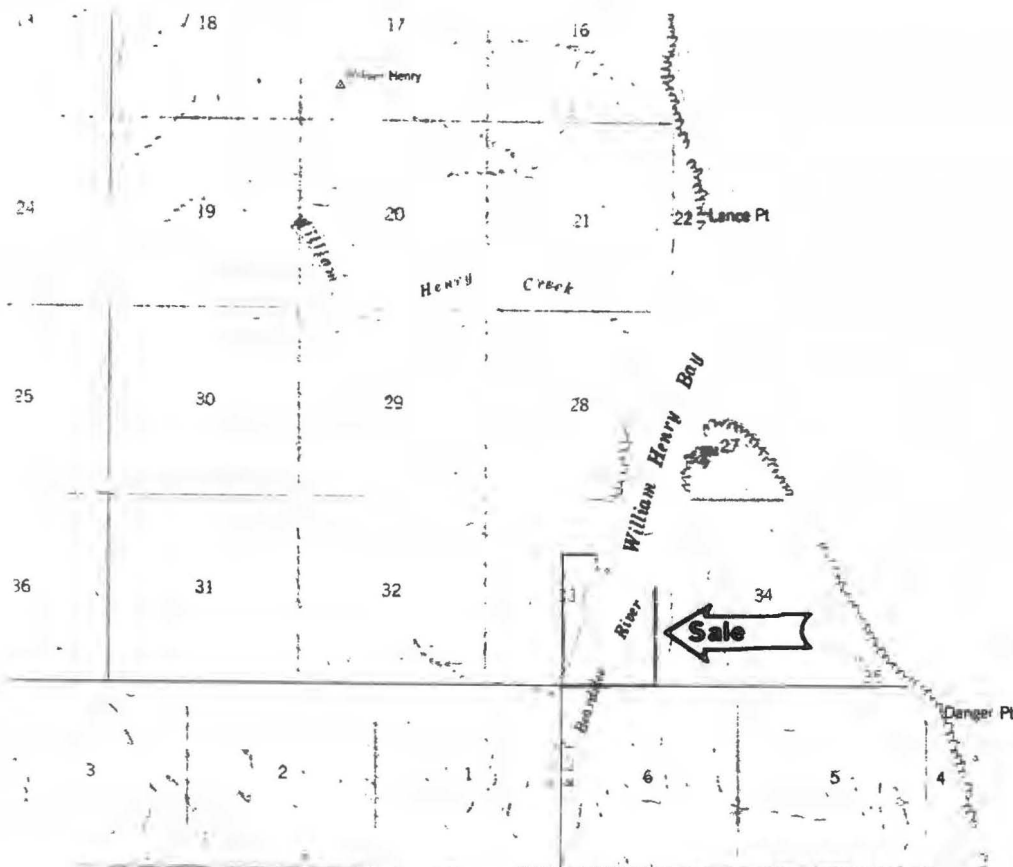
BUYER/SELLER MOTIVATION: Buyer intended to develop site for recreation with lodges and cabins. Seller was probably getting ready to retire.

COMMENTS:

Unable to locate buyer or seller through tax records or information. All information was confirmed by the Haines assessor, Dan Turner, who had received information from the seller just after the sale, and Charles Horan, MAI, (Comparable Data Sheet). Mr. Horan indicates that there is a very small market for large acreage tracts similar to the subject. Site was subdivided into 61 rural homesites.

Large tidal flat obscures boat access at low tides. The flats have wet grassy lands, beaver ponds, and patches of Hemlock and Spruce.

COMPARABLE NO. 1



COMPARABLE LAND SALE NO. 2

DATE OF SALE: 12-19-88 **SIZE (ACRE):** 98.5 **PRICE/ACRE:** \$863 **RECORD NO.:** 2

STATE: Alaska **RECORDING DISTRICT:** Sitka **USGS QUAD MAP NO.:** Sumdum C-4,5
REGION: Southeastern **SUB-REGION:** Juneau

COMMUNITY/NEIGHBORHOOD: Windham Bay

LOCATION: Windham Bay, Windham, Alaska

LEGAL DESCRIPTION: USMS 37, 38,39, 40, and 41, and the unpatented claim Pauline, Sitka Land District

RIGHTS CONVEYED: Fee simple except for oil and gas

GRANTOR: Cliff Slater, Denali Charters

GRANTEE: Laura and Scott Rideout, et al

TAX ID: Not taxed **INSTRUMENT:** W D **BOOK/PAGE:** 310/991 **RECD'G DATE:** 1-18-89

SALES PRICE: \$85,000 **TERMS:** Cash

CEV/ADJ. PRICE: \$85,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED Cliff Slater 767-5575
WITH: Laura and Scott Rideout, et al 568-2263

BY/ DLP/1-94
DATE: DLP/1-94

PRESENT USE: Vacant, mining claims

INTENDED USE: Potential lodge with some panning activity.

IMPROVEMENTS: Old Post Office

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Generally level w/slight slope

PHYSICAL ACCESS: Boat, plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Partially drained

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Streams and Ocean

VEGETATION: Forested - sparse

MARKET EXPOSURE: Buyer advertised it on his own for several years. It sold within six months of listing it with a broker.

SUPPLY & DEMAND CHARACTERISTICS: Small market but fairly active with numerous buyers and sellers.

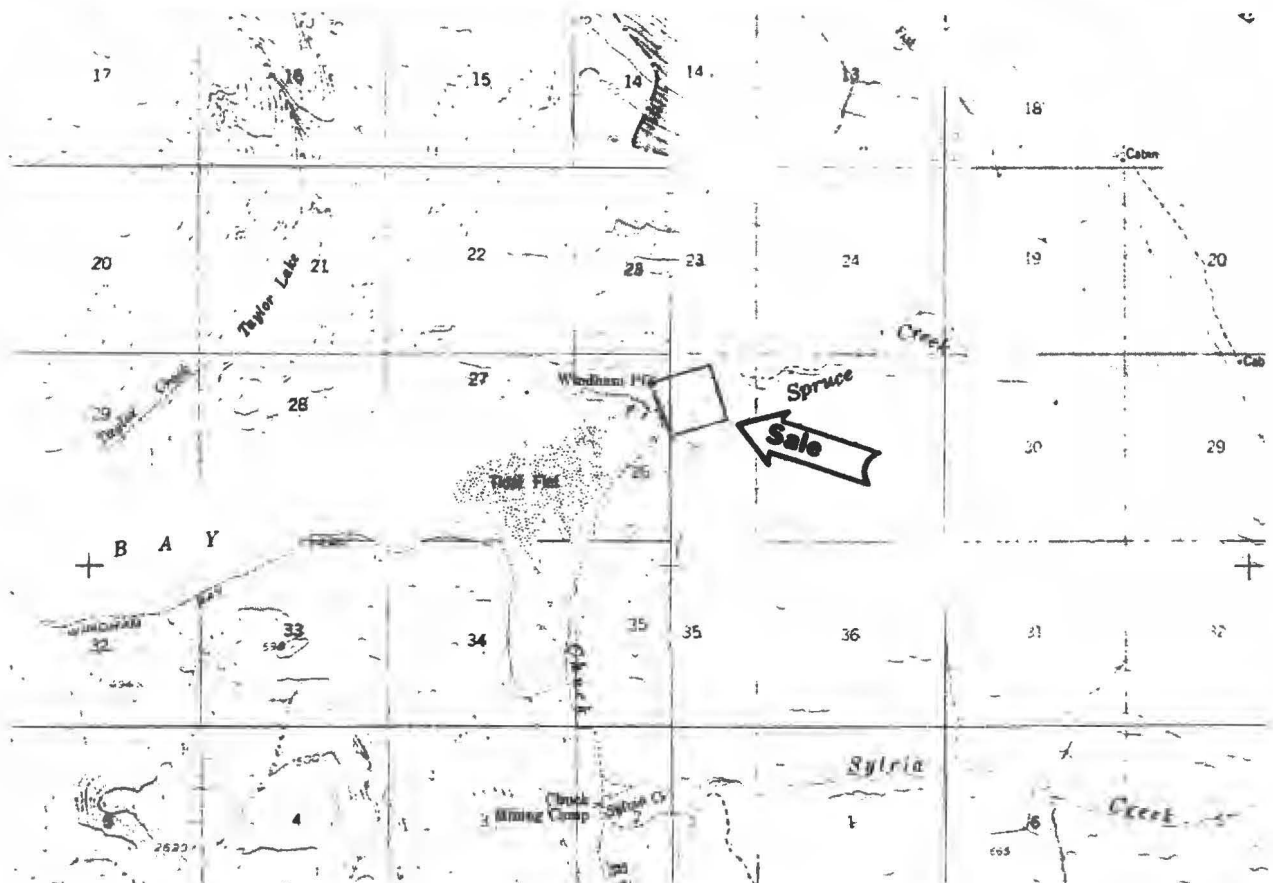
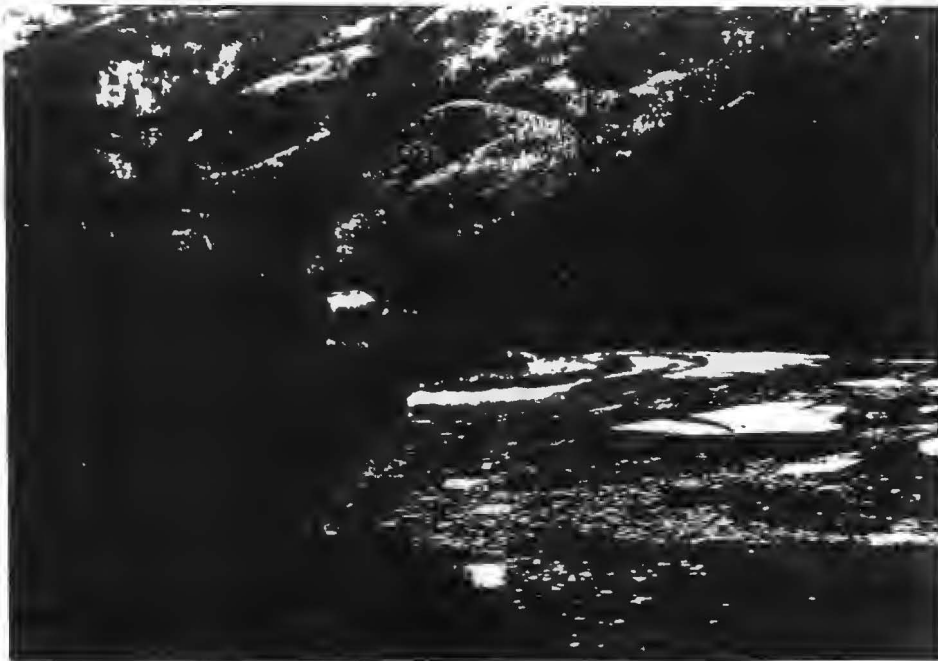
BASIS FOR PURCHASE PRICE: Negotiation. Both buyer and seller felt it represented market.

BUYER/SELLER MOTIVATION: Seller's partners moved out of state. Buyer and partners considered it a piece of recreational property.

COMMENTS:

This is an irregularly configured site located at the head of Windham Bay. The site has extensive frontage due to the accumulation of mining tailings that line the beach front. There is a stream that runs through the middle of the property with several drainage courses. Soil conditions are alluvial. The site has generally level topography, except to the rear and side property lines. There is some tree covering of hemlock and spruce. There is about 1,957 feet of stream frontage. Seller was a partner with several relatives. He sold the site when they moved out of state because he did not feel that he could work the sites alone. Seller indicates that the site yields good gold quantities for recreational miners. Buyers acquired site for different reasons. One is a recreational gold panner who works the site for fun. Two of the other buyers thought they may someday wish to put a lodge on the site. So far no lodge has been constructed. This was the former site of a village and Post Office building that operated in the 1920's. The building is still on site but was allocated no value by the buyers or seller. The minerals value from gold panning was not allocated a specific value, but rather was considered to be an amenity of the site.

COMPARABLE NO. 2



COMPARABLE LAND SALE NO. 3

DATE OF SALE: 7-22-93 **SIZE (ACRE):** 80 **PRICE/ACRE:** \$2,500 **RECORD NO.:** 3

STATE: Alaska **RECORDING DISTRICT:** Kvichak

USGS QUAD MAP NO.: Dillingham A-5

REGION: Western Alaska

SUB-REGION: Dillingham

COMMUNITY/NEIGHBORHOOD: Nushagak River

LOCATION: Southwest corner of the confluence of the Nushagak and Iowithla Rivers, approximately 26 miles east of Dillingham, Alaska

LEGAL DESCRIPTION: U.S. Survey No. 7729, Section 31, T12S, R50W, SM and Section 3, T13S, R50W, SM

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Esther Ladd

GRANTEE: Burt Bomhoff

TAX ID:

INSTRUMENT: MOA

BOOK/PAGE: 42/52

RECD'G DATE: 4-12-94

SALES PRICE: \$200,000

TERMS: \$100,000 down, 9% interest and five year term.

CEV/ADJ. PRICE: \$200,000

BASIS FOR ADJUSTMENT: None - large down with short term.

CONFIRMED Dick Larson, BIA

BY/ DLP/8-94

WITH: Burt Bomhoff

DATE: DLP/8-94

PRESENT USE: Old cabin, no value

INTENDED USE: Commercial recreation

IMPROVEMENTS: Old cabin

HIGHEST & BEST USE: Recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Rolling

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Flag

ROAD IMPROVEMENTS: Unimproved

SOILS: Predominately well drained, 15% wet

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: 1,848' on Nushagak, 200' on the Iowithla

VEGETATION: Wooded with spruce birch and brush.

MARKET EXPOSURE: BIA auction properties are typically advertised for four weeks prior to bid deadline.

SUPPLY & DEMAND CHARACTERISTICS: Burt Bomhoff indicated this is a one of a kind lodge site. World class sites are limited.

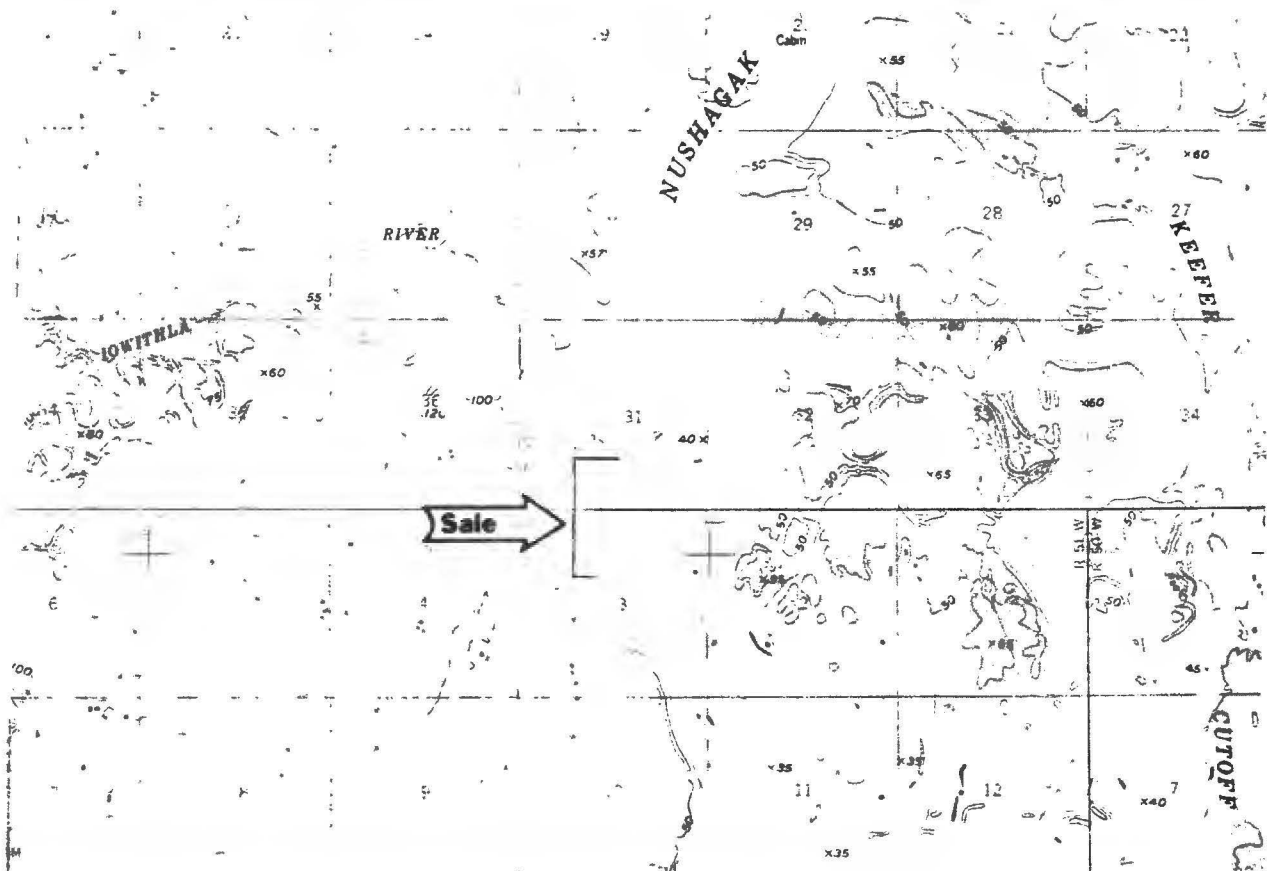
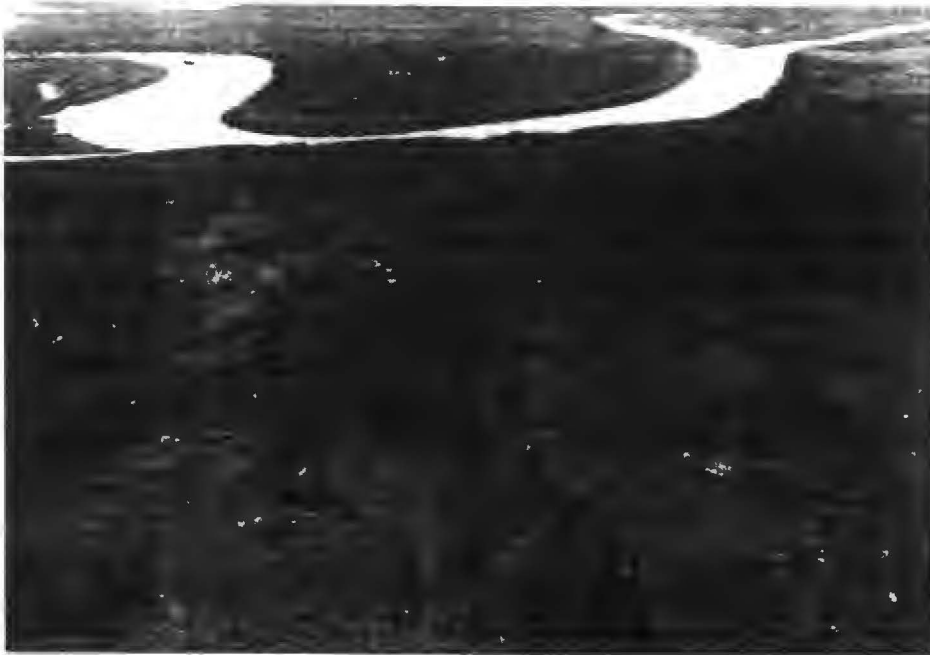
BASIS FOR PURCHASE PRICE: Highest bid received at BIA auction. Sold for significantly more than appraised value.

BUYER/SELLER MOTIVATION: Buyer is considering developing the site with a lodge. Site was excess to sellers needs.

COMMENTS:

The buyer indicated that he owned and operated the Goldenhorn Lodge for 15± years. Reportedly this lodge was one of the premier luxury lodges in western Alaska. Buyer had established a small cabin on the subject site for fly fisherman clients. Buyer claimed this site is world class with one of the best places in the region, as fly fisherman can catch King Salmon from shore. Buyer sold his existing lodge operation in 1990 and immediately began an extensive search for a new lodge site. After three years, intensive aerial searches, and title searches from government records, the buyer heard that this site was going to BIA auction. Buyer was aware of that his bid was significantly greater than appraised value, but felt the site was a one of a kind for a lodge operation. He felt that because he had successfully operated a lodge for 15± years, he knew what he could afford to pay for the site.

COMPARABLE NO. 3



COMPARABLE LAND SALE NO. 4

DATE OF SALE: 7-15-93 **SIZE (ACRE):** 119.99 **PRICE/ACRE:** \$1,908 **RECORD NO.:** 4

STATE: Alaska **RECORDING DISTRICT:** Kvichak **USGS QUAD MAP NO.:** Iliamna A-

REGION: Western Alaska **SUB-REGION:** Iliamna

COMMUNITY/NEIGHBORHOOD: Lake Nonvianuk

LOCATION: North bank Nonvianuk River, 1.5 miles west of Lake Nonvianuk, Alaska

LEGAL DESCRIPTION: U.S. Survey No. 8146

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Edwin Peterson

GRANTEE: T Corporation (Chris Branham)

TAX ID: **INSTRUMENT:** MOA **BOOK/PAGE:** 29/202 **RECD'G DATE:** 2-14-94

SALES PRICE: \$229,000 **TERMS:** \$150,000 down, 8% interest, six year term.

CEV/ADJ. PRICE: \$229,000 **BASIS FOR ADJUSTMENT:** None - large down with short term.

CONFIRMED Dick Larson, BIA
WITH: Vicky Kirby, BBNA

BY/ DLP/8-94
DATE: DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Commercial recreation

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Rolling

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Flag

ROAD IMPROVEMENTS: Unimproved

SOILS: Predominately well drained, 15% wet

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: 300-400' Lake and 2,500' River

VEGETATION: Wooded with spruce birch and brush

MARKET EXPOSURE: Previously advertised with no response. Remained on BBNA Realty's offering list until this offer.

SUPPLY & DEMAND CHARACTERISTICS: Close to Iliamna, many recreational uses, fairly active market with intermittent demand and competing sites.

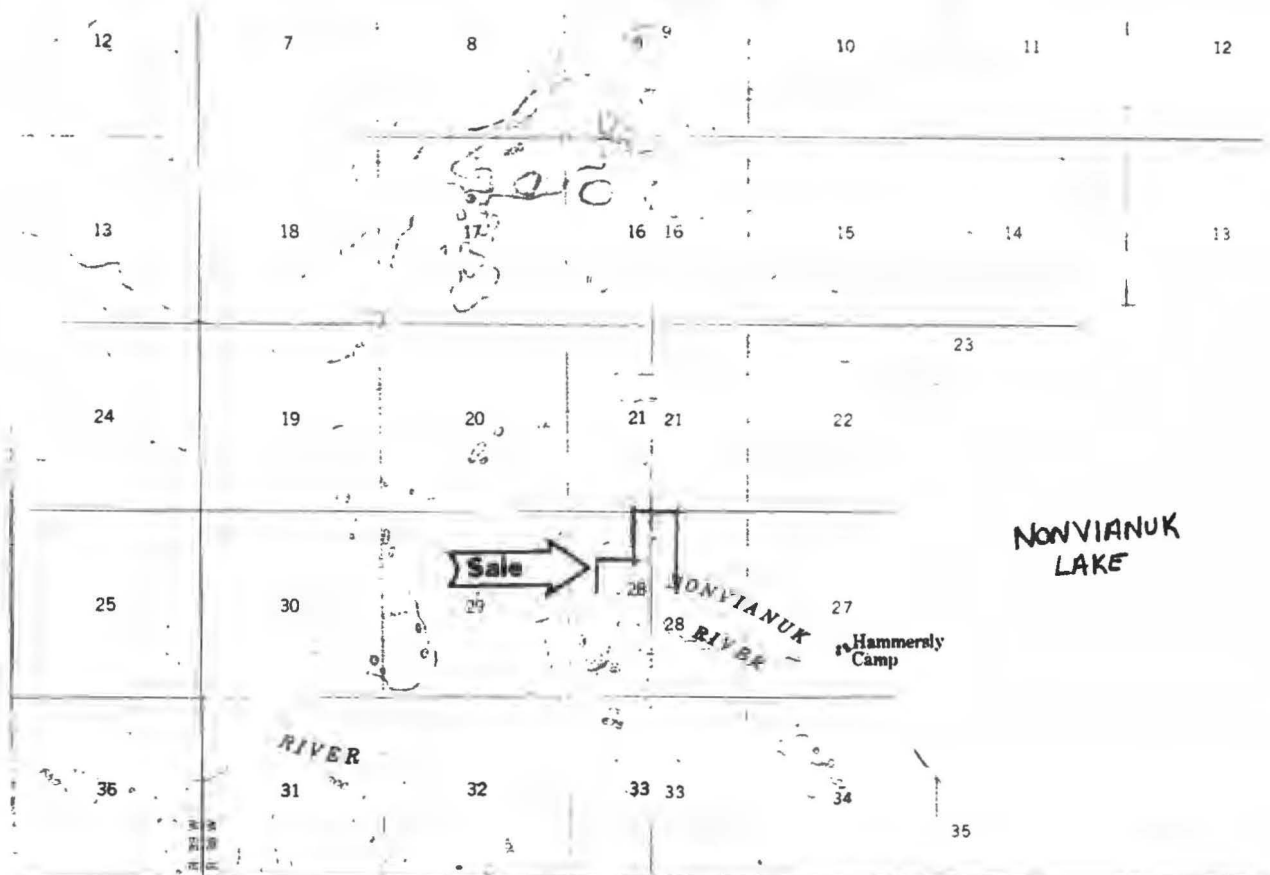
BASIS FOR PURCHASE PRICE: Negotiated, considered arms-length.

BUYER/SELLER MOTIVATION: Buyer is considering developing the site with a lodge.

COMMENTS:

This parcel is 1.5 miles west of Nonvianuk Lake. It has good access by float plane on Larson Lake and and boat access along Nonvianuk River. A tributary of the Alagnak River, which is designated a wild and scenic river. The Alagnak River is a tributary of the Kvichak, which is the outlet of Lake Iliamna. The Nonvianuk River is known for its world class sport fishing for trout and salmon. This area has good hunting, fishing, boating and rafting. The site has numerous sites adequate for permanent structure development.

COMPARABLE NO. 4



COMPARABLE LAND SALE NO. 5

DATE OF SALE: 4-88 **SIZE (ACRE):** 19.3 **PRICE/ACRE:** \$5,181 **RECORD NO.:** 5

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak A-6

REGION: Southcentral **SUB-REGION:** Kodiak Island

COMMUNITY/NEIGHBORHOOD: Olga Bay

LOCATION: Olga Bay near Horse Marine Lagoon, Kodiak Island, Alaska

LEGAL DESCRIPTION: USS 1889

RIGHTS CONVEYED: Fee simple estate including subsurface

GRANTOR: Ayakulik Associates

GRANTEE: B & M Burkholder

TAX ID: **INSTRUMENT:** QCD **BOOK/PAGE:** 91/37 **RECD'G DATE:** 4-18-88

SALES PRICE: \$100,000 **TERMS:** 20% down, 10% interest, five year balloon

CEV/ADJ. PRICE: \$100,000 **BASIS FOR ADJUSTMENT:** None - terms are considered to be cash equivalent.

CONFIRMED WITH: Grantor, KIB Questionnaire
Pat Carlson, KIB Assessor who confirmed for court testimony.
Reed Stoopes, Grantor Rep.

BY/ DATE: WH/5-27-88
DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Commercial Set Net and Commercial Recreation

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Visual

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular, high front to depth ratio

ROAD IMPROVEMENTS: None

SOILS: Visual

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: Extensive Olga Bay frontage

VEGETATION: Some cottonwood stands, low brush, grasses and alder thickets.

MARKET EXPOSURE: Formally listed with Kodiak Island Realty firm. Unable to confirm length of marketing time.

SUPPLY & DEMAND CHARACTERISTICS: Although limited, there is some demand for strategic sites like this parcel.

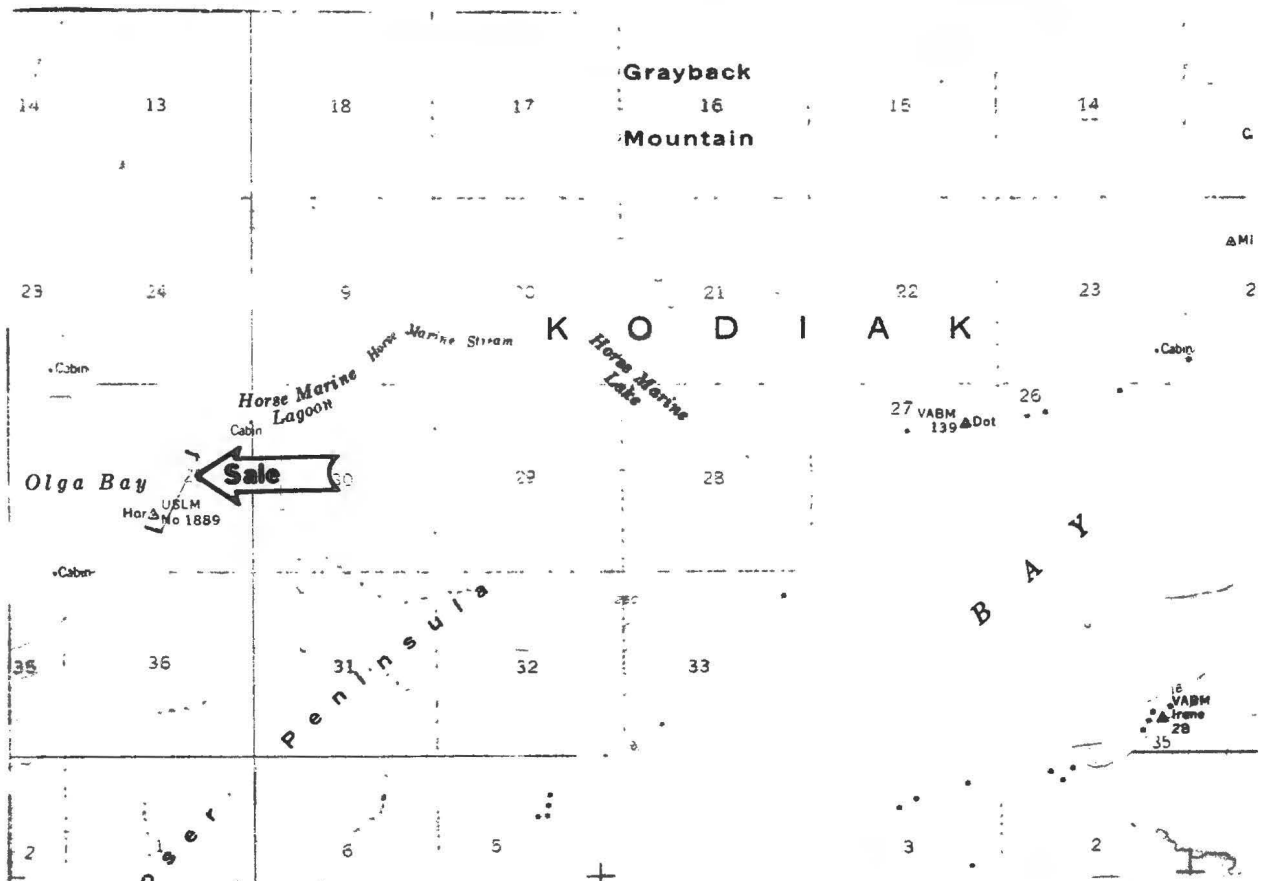
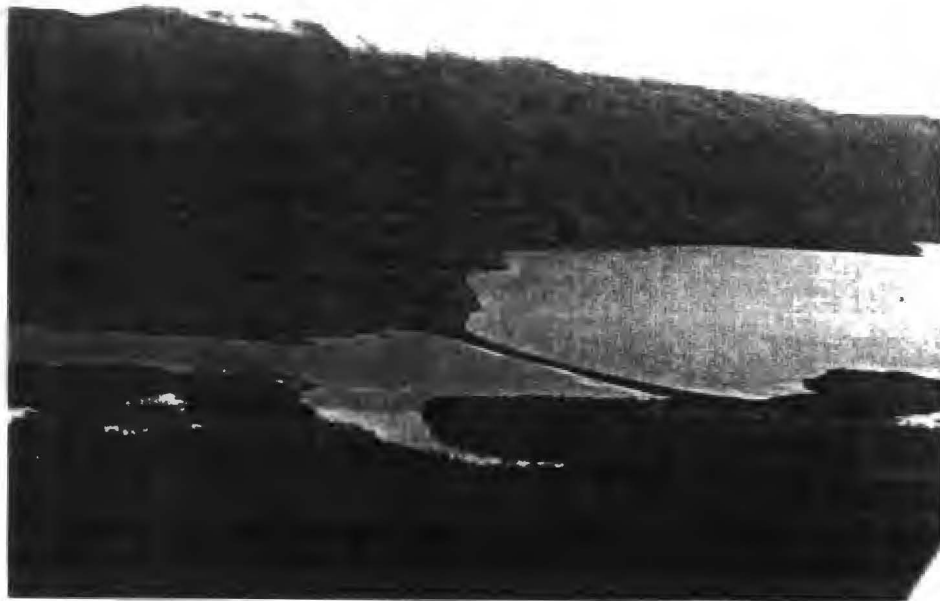
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Seller acquired site as part of larger real estate transaction, Liquidated site as it was surplus to their needs. Buyer wanted to develop hunting and fishing lodge.

COMMENTS:

Site is located on the east end of Olga Bay near the head of Horse Marine Lagoon. Site has a very favorable frontage to depth ratio. The owners have constructed a residence to support their commercial fishing operation. On another portion of the site a guide has developed a seasonal fishing guide operation. According to Reed Stoopes, there is no known mineral deposits on this site. He felt that it was extremely unlikely that the buyers allocated more than a nominal value for the subsurface estate.

COMPARABLE NO. 5



COMPARABLE LAND SALE NO. 6

DATE OF SALE: 6-88 **SIZE (ACRE):** 32.35 **PRICE/ACRE:** \$3,246 **RECORD NO.:** 6

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Karluk A-1

REGION: Southcentral

SUB-REGION: Kodiak Island

COMMUNITY/NEIGHBORHOOD: Olga Bay

LOCATION: Northwest portion of Olga Bay, Kodiak Island, Alaska

LEGAL DESCRIPTION: USS 1886

RIGHTS CONVEYED: Fee simple estate including subsurface

GRANTOR: Ayakulik Associates

GRANTEE: DJ King (486-3962) and TA MacDonald

TAX ID: **INSTRUMENT:** QCD **BOOK/PAGE:** 91/705 **RECD'G DATE:** 6-21-88

SALES PRICE: \$105,000 **TERMS:** \$21,000 down, 10% interest, five year balloon

CEV/ADJ. PRICE: \$105,000 **BASIS FOR ADJUSTMENT:** None - terms are considered to be cash equivalent.

CONFIRMED WITH: Grantee, KIB Questionnaire
Pat Carlson, KIB Assessor who confirmed for court testimony.
Reed Stoores, Grantor Rep.

BY/ DATE: WH/TC/2-93
DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Commercial recreation

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Rolling Hills

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular, high front to depth ratio

ROAD IMPROVEMENTS: None

SOILS: Low marshy with some building areas

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: 2,574' Olga Bay frontage, small creek and pond

VEGETATION: Some cottonwood stands, low brush, grasses and alder thickets.

MARKET EXPOSURE: Formally listed with Kodiak Island Realty firm. Unable to confirm length of marketing time.

SUPPLY & DEMAND CHARACTERISTICS: Although limited, there is some demand for strategic sites like this parcel.

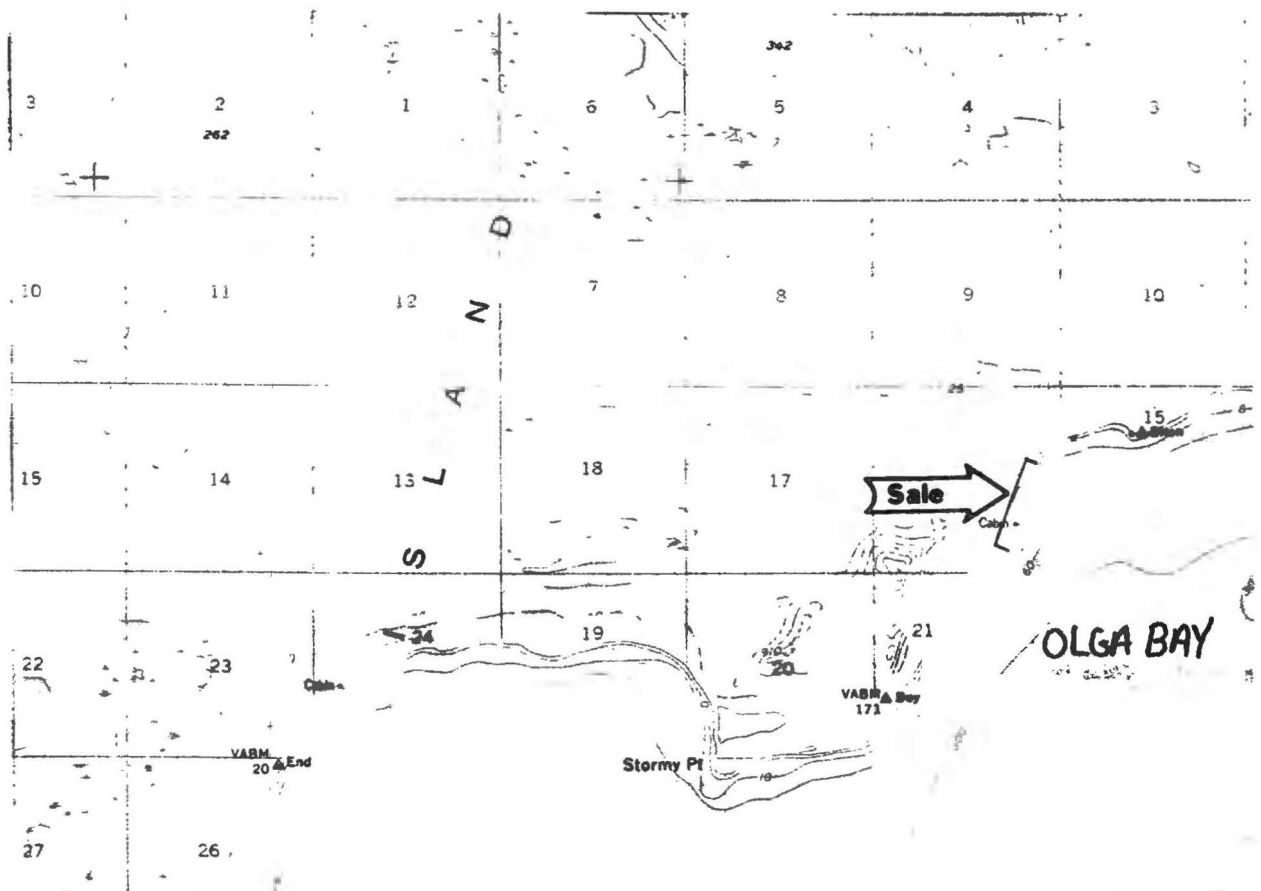
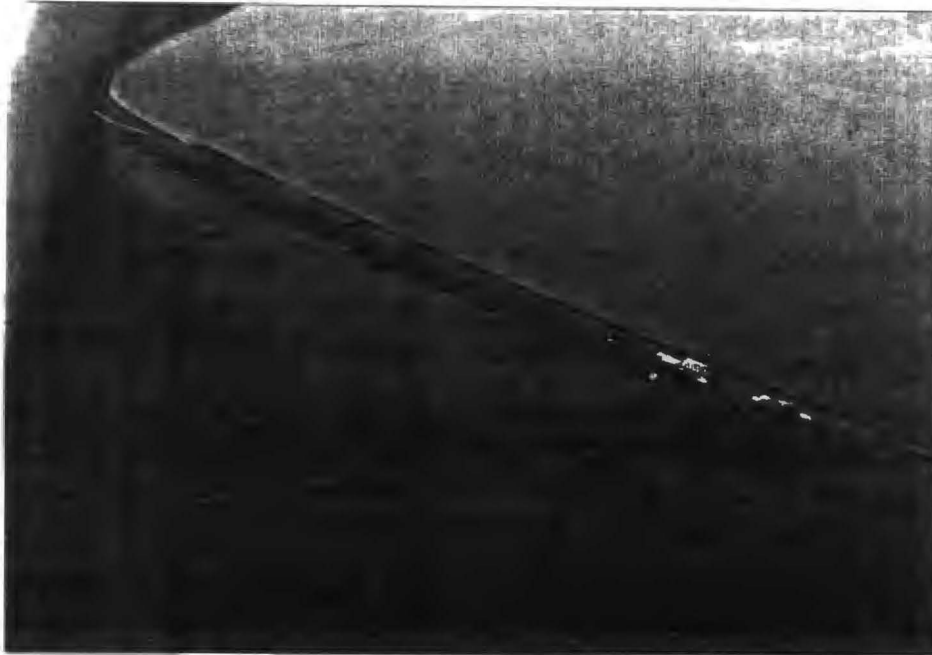
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Seller acquired site as part of larger real estate transaction, Liquidated site as it was surplus to their needs.
Buyers wanted it to support their fishing sites.

COMMENTS:

This site is located at the northwest corner of Olga Bay. The site offers substantial Olga Bay frontage. There is a large pond and creek on the parcel. Beach access is good with long gravel beach. Since purchase the owners have constructed a small hunting and fishing lodge. The property borders the Kodiak National Wildlife Refuge, noted for both Kodiak Brown Bear and Sitka Blacktail Deer. The general area is rolling hills with brush overgrowth and many low marshy areas. According to Reed Stoores, there is no known mineral deposits on this site. He felt that it was extremely unlikely that the buyers allocated more than a nominal value for the subsurface estate.

COMPARABLE NO. 6



COMPARABLE LAND SALE NO. 7

DATE OF SALE: 1-89 **SIZE (ACRE):** 29.1 **PRICE/ACRE:** \$3,436 **RECORD NO.:** 7

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Trinity Islands D-1
REGION: Southcentral **SUB-REGION:** Kodiak Island
COMMUNITY/NEIGHBORHOOD: Moser Bay
LOCATION: Snug cove in Moser Bay, Kodiak Island, Alaska

LEGAL DESCRIPTION: USS 50

RIGHTS CONVEYED: Fee simple estate including subsurface

GRANTOR: Ayakulik Associates

GRANTEE: R. Ellingson,(487-2603), J Masneri, C. Slater

TAX ID: **INSTRUMENT:** QCD **BOOK/PAGE:** 94/667 **RECD'G DATE:** 1-24-89

SALES PRICE: \$100,000 **TERMS:** 10% interest with yearly payments, ten year term.

CEV/ADJ. PRICE: \$100,000 **BASIS FOR ADJUSTMENT:** None - terms are considered to be cash equivalent.

CONFIRMED Grantor
WITH: Pat Carlson, KIB Assessor who confirmed for court testimony.
Reed Stoores, Grantor Rep.

BY/ KIB/3-89
DATE: DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Set Net Fishing Operations

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Undulating

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Varies from developable to very wet and marshy

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: 1,155' Moser Bay frontage, small creek and pond

VEGETATION: Low brush, grasses and alder thickets.

MARKET EXPOSURE: Formally listed with Kodiak Island Realty firm. Unable to confirm length of marketing time.

SUPPLY & DEMAND CHARACTERISTICS: Although limited, there is some demand for strategic sites like this parcel.

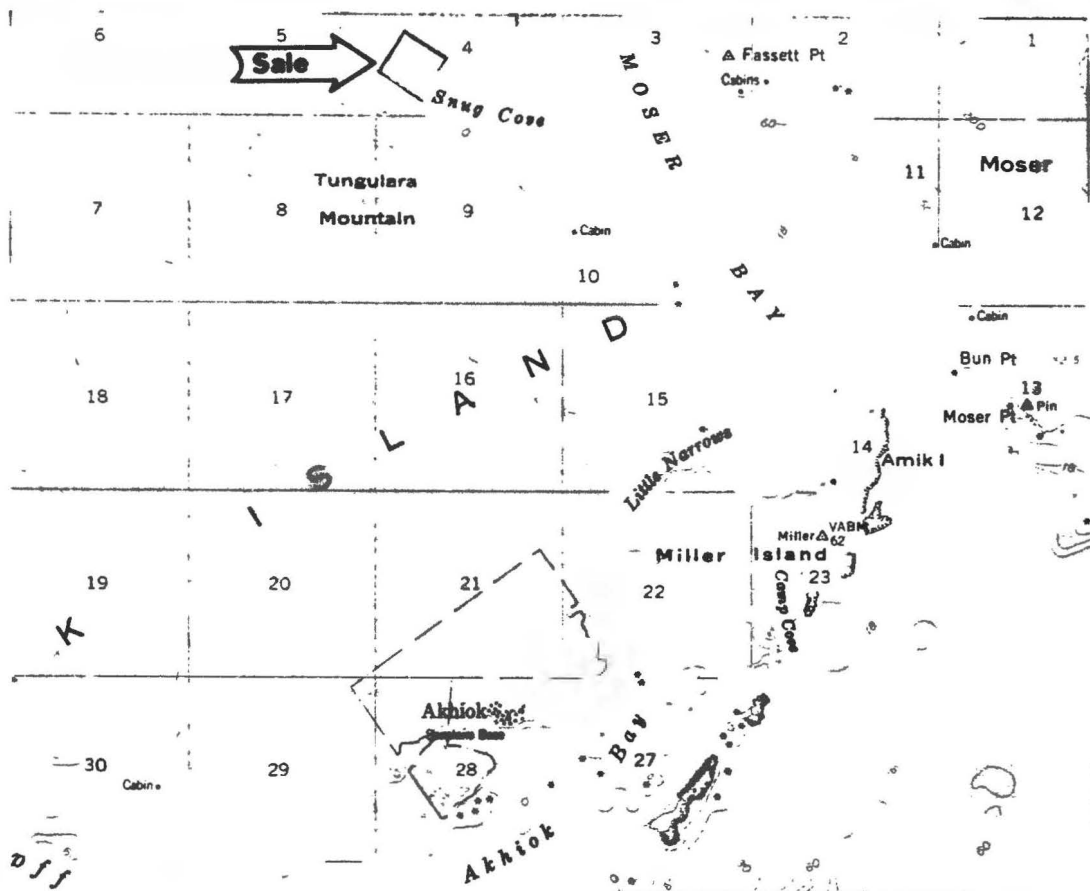
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Seller acquired site as part of larger real estate transaction, Liquidated site as it was surplus to their needs. Buyer used it support his fishing operations.

COMMENTS:

This parcel is a former cannery site and was purchased by a group of fisherman who operate set net sites in the immediate area and plan to use the site in support of their fishing operations. The topography of the site is poor due to a large wetland in the center of the parcel and steep bluffs on the rear and side property lines. Although the anchorage is fair to good, access to the beach is impeded by the shallow depths at the head of the cove. The parcel has a pond and a stream running across the property. According to Reed Stoores, there is no known mineral deposits on this site. He felt that it was extremely unlikely that the buyers allocated more than a nominal value for the subsurface estate.

A black and white photograph of a mountainous landscape. The foreground is dark and shadowed, showing a steep slope. In the middle ground, a winding road or path is visible, leading towards a series of rugged, rocky mountains. The sky is bright and overexposed.



BLACK-SMITH & RICHARDS, INC

COMPARABLE LAND SALE NO. 8

DATE OF SALE: 3-89 **SIZE (ACRE):** 19.61 **PRICE/ACRE:** \$5,099 **RECORD NO.:** 8

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Karluk A-2
REGION: Southcentral **SUB-REGION:** Kodiak Island
COMMUNITY/NEIGHBORHOOD: Olga Bay
LOCATION: Southwest end of Olga Bay near Olga Creek, Kodiak Island, Alaska

LEGAL DESCRIPTION: USS 174

RIGHTS CONVEYED: Fee simple estate including subsurface

GRANTOR: Ayakulik Associates

GRANTEE: S&D Omlid,(486-5633), O&C Omlid

TAX ID: **INSTRUMENT:** QCD **BOOK/PAGE:** 94/228 **RECD'G DATE:** 3-9-89

SALES PRICE: \$100,000 **TERMS:** \$5,000 down, 10% interest, 5 year balloon

CEV/ADJ. PRICE: \$100,000 **BASIS FOR ADJUSTMENT:** None - terms are considered to be cash equivalent.

CONFIRMED WITH: Grantor
Pat Carlson, KIB Assessor who reconfirmed for court testimony.
Reed Stoopes, Grantor Rep.

BY/ DATE: PSC/4-4-89
DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Set Net Fishing Operations

IMPROVEMENTS: None

HIGHEST & BEST USE: Residential/Recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Fairly level

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Varies

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: 1,326 Olga Bay frontage

VEGETATION: Low brush, grasses and alder thickets.

MARKET EXPOSURE: Formally listed with Kodiak Island Realty firm. Unable to confirm length of marketing time.

SUPPLY & DEMAND CHARACTERISTICS: Although limited, there is some demand for strategic sites like this parcel.

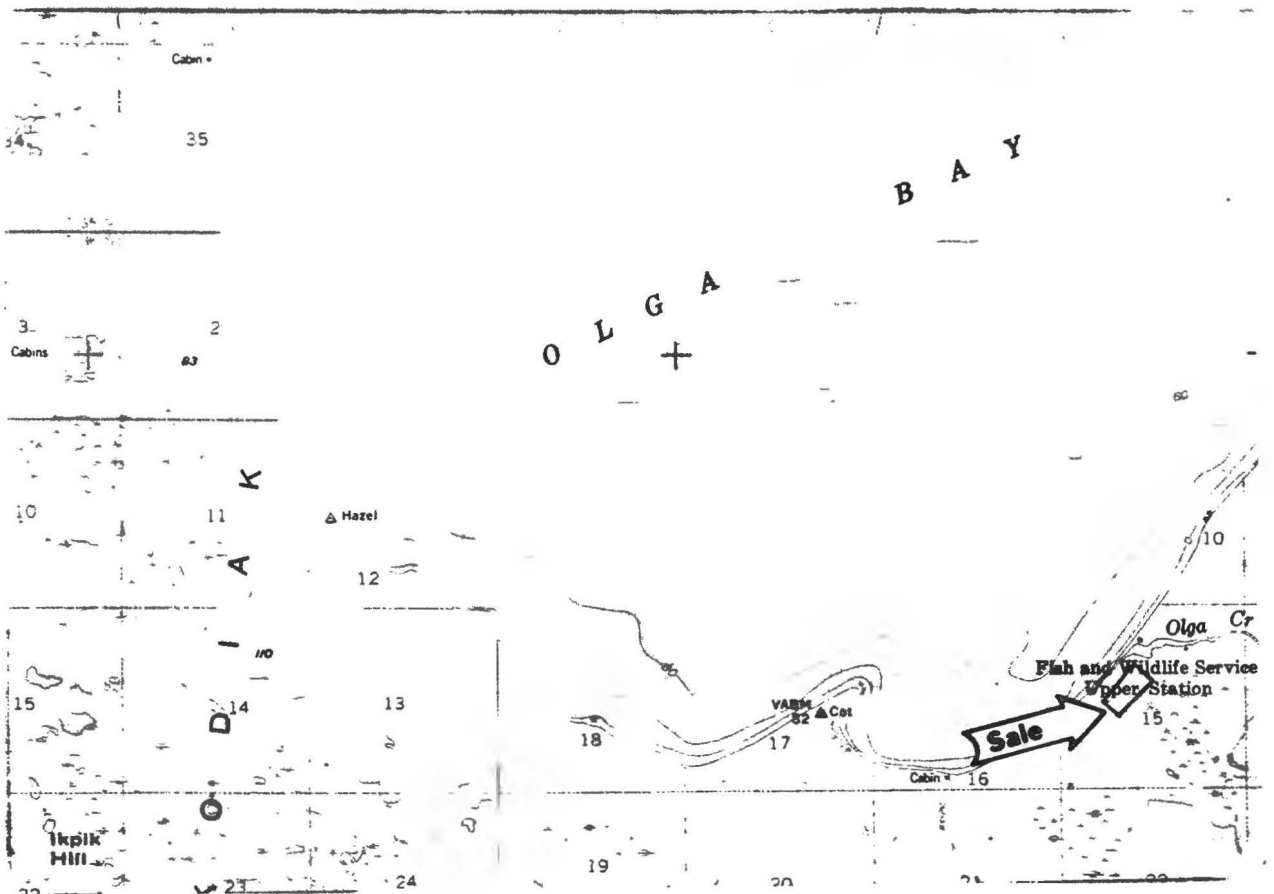
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Seller acquired site as part of larger real estate transaction, Liquidated site as it was surplus to their needs. Buyer used it support his fishing operations.

COMMENTS:

This parcel fronts Olga Bay and a creek along the front. It was bought as a support center for fishing operations. A large shop and two cabins have been built. The site is fairly level and offers good access, but the anchorage is poor in times of wind. According to Reed Stoopes, there is no known mineral deposits on this site. He felt that it was extremely unlikely that the buyers allocated more than a nominal value for the subsurface estate.

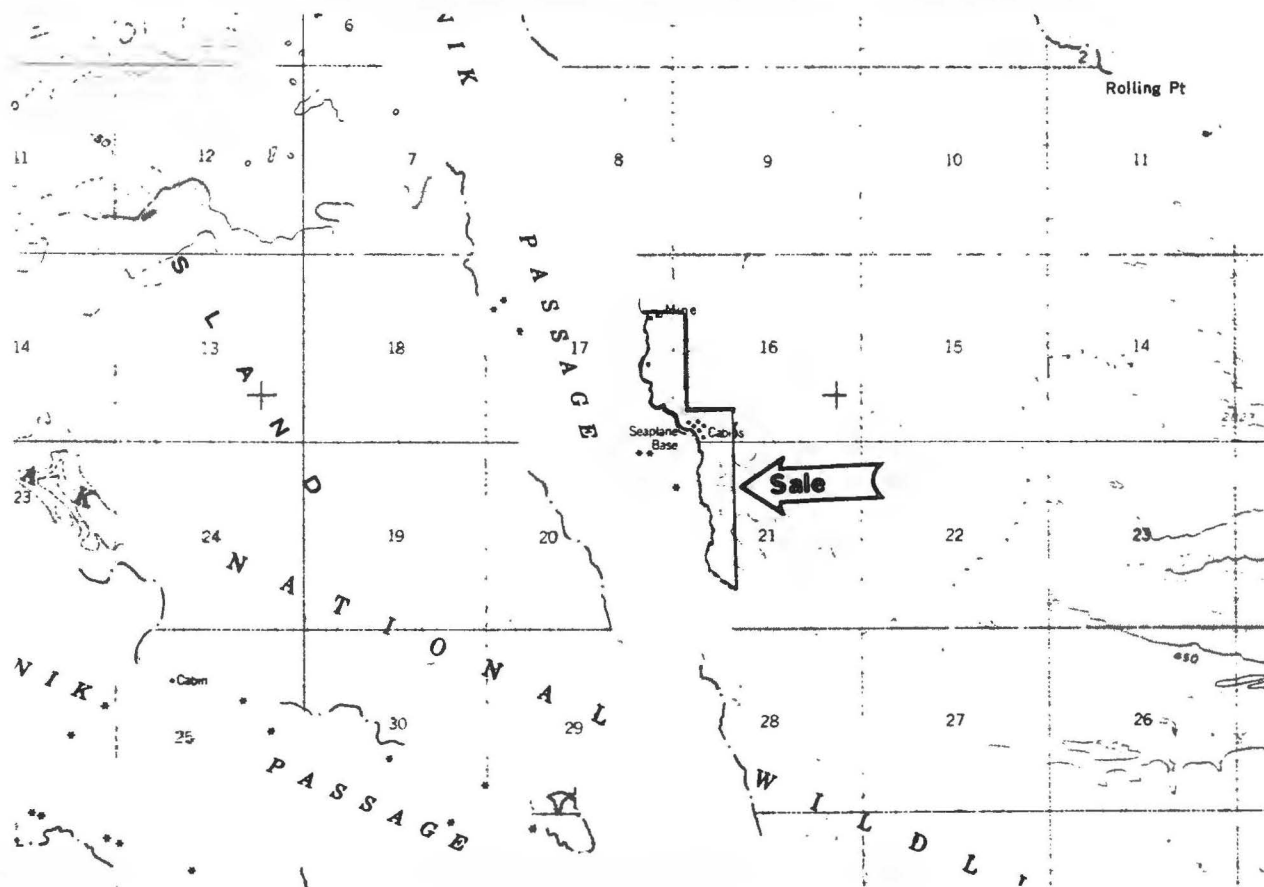
COMPARABLE NO. 8



COMPARABLE LAND SALE NO. 9**DATE OF SALE:** 06-01-91 **SIZE (ACRE):** 151.21 **PRICE/ACRE:** \$2,500 **RECORD NO.:** 9**STATE:** Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak D-4**REGION:** Southcentral **SUB-REGION:** Kodiak Island**COMMUNITY/NEIGHBORHOOD:** Uganik Passage near Terror Bay**LOCATION:** East shore of Uganik Passage, Kodiak Island, Alaska**LEGAL DESCRIPTION:** U.S. Survey 7886**RIGHTS CONVEYED:** Fee simple surface estate only**GRANTOR:** Clara Helgason**GRANTEE:** U.S. Fish & Wildlife**TAX ID:** R5200004110 **INSTRUMENT:** W D **BOOK/PAGE:** 108/320 **RECD'G DATE:** 8-6-91**SALES PRICE:** \$470,000 **TERMS:** Cash**CEV/ADJ. PRICE:** \$378,025 **BASIS FOR ADJUSTMENT:** Reduction of personal property items and house and outbuildings.**CONFIRMED WITH:** Dick Larson, BIA Appraiser
Bob Rice, U.S. Fish & Wildlife
Duke Bertke, Selling Agent
John Merrick, Koniag**BY/ DATE:** SDD/11-91
DLP/01-94
DLP/01-94
DLP/03-94**PRESENT USE:** Bear hunting lodge**INTENDED USE:** Inclusion into KNWR**IMPROVEMENTS:** SFR, outbuildings**HIGHEST & BEST USE:** Recreation**LEGAL ACCESS:** Yes**TOPOGRAPHY:** Sloping**PHYSICAL ACCESS:** Boat**SITE SHAPE:** Irregular**ROAD IMPROVEMENTS:** Unimproved**SOILS:** Average**UTILITIES:** None**EASEMENTS:** Normal**ZONING:** Conservation**WATERFRONT:** Ocean**VEGETATION:** Cottonwoods, scrub alder and grass.**MARKET EXPOSURE:** Initially listed for \$1.8M. It was slowly lowered to about \$1M over the first year. Relisted at \$550,000 prior to sale. See comments section.**SUPPLY & DEMAND CHARACTERISTICS:** There is a limited market for large sites in the Kodiak and Afognak area.**BASIS FOR PURCHASE PRICE:** Appraisal.**BUYER/SELLER MOTIVATION:** Seller was elderly and son needed a hip replacement. Bob Rice indicated that the buyer is limited by law to pay no more or less than market value.**COMMENTS:**

This is the sale of the surface estate of the Helgason homestead, an inholding in the Kodiak National Wildlife Refuge, to U.S. Fish and Wildlife for \$470,000. The subsurface estate is owned by Koniag. Improvements consist of an older one-story, 1,055 square foot, two-bedroom, one-bath home plus outbuildings and personal property valued at \$91,975, rounded. The land was valued at \$378,025 or \$2,500 per acre. The terrain varies from moderate to steeply sloping. Vegetation consists of cottonwoods, scrub alder and grass. There is good deer and bear hunting in the area. Moored boats would be exposed to some northwesterly winds, but most of the area is generally protected. There is almost one mile of beach frontage. The northern half of the site has poor beaches with steep rocky bluffs along the waterfront and lots of boulders. Waterfront elevation varies from sea level to almost 40 feet. The southern portion of the site has much better access off the water and superior beaches. The USF&W Service did not acquire this site for the improvements. The improvements are an additional cost of acquiring the site. They will utilize the improvements as a place to bunk down USF&WS officials closer to the refuge. USF&WS offered \$468,000 when the property was initially listed at \$1.8M. After the price was reduced to \$550,000 USF&WS again approached the seller who agreed to the price after several weeks of contemplation. The federal government pays for all transaction and closing costs, except for real estate commissions when they acquire property. Mr. Rice estimates the transaction costs of this acquisition was roughly \$30,000. The listing agent is quite ill and was not able to be interviewed regarding marketing strategy and market exposure. Based on conversations with the selling agent and buyer, it is reasonable to conclude that the site had adequate market exposure with a term between one and two years.

COMPARABLE NO. 9



COMPARABLE LAND SALE NO. 10

DATE OF SALE: 8-93 **SIZE (ACRE):** 574.88 **PRICE/ACRE:** \$1,739 **RECORD NO.:** 10

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak A-2
REGION: Southcentral **SUB-REGION:** Kodiak Island
COMMUNITY/NEIGHBORHOOD: Ayakulik River
LOCATION: Ayakulik River, south end of Kodiak Island, Alaska

LEGAL DESCRIPTION: Portions of Sections 27, 28, 33, 34 T34S, R33W, SM

RIGHTS CONVEYED: Fee simple estate including subsurface estate

GRANTOR: Offeree: Ayakulik, Inc.

GRANTEE: Offeror: Conservation Fund

TAX ID: **INSTRUMENT:** N/A **BOOK/PAGE:** N/A **RECD'G DATE:** N/A

SALES PRICE: \$1,000,000 **TERMS:** Cash offer

CEV/ADJ. PRICE: \$1,000,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED Ken Hertz Ayakulik, Inc.
WITH: Bob Putz, Conservation Fund 304 876-2815

BY/ DLP/08-94
DATE: DLP/08-94

PRESENT USE: Fish weir and cabin

INTENDED USE: Preservation/Refuge Addition

IMPROVEMENTS: None

HIGHEST & BEST USE: Multi-use recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Rolling

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Unconfirmed

UTILITIES: None

EASEMENTS: Normal

ZONING: Conservation

WATERFRONT: Ayakulik River and ocean frontage Kodiak A-2

VEGETATION: Low land brush and non-merchantable timber

MARKET EXPOSURE: Not marketed, buyer approached seller

SUPPLY & DEMAND CHARACTERISTICS: Although limited, there is some demand for strategic sites like this parcel.

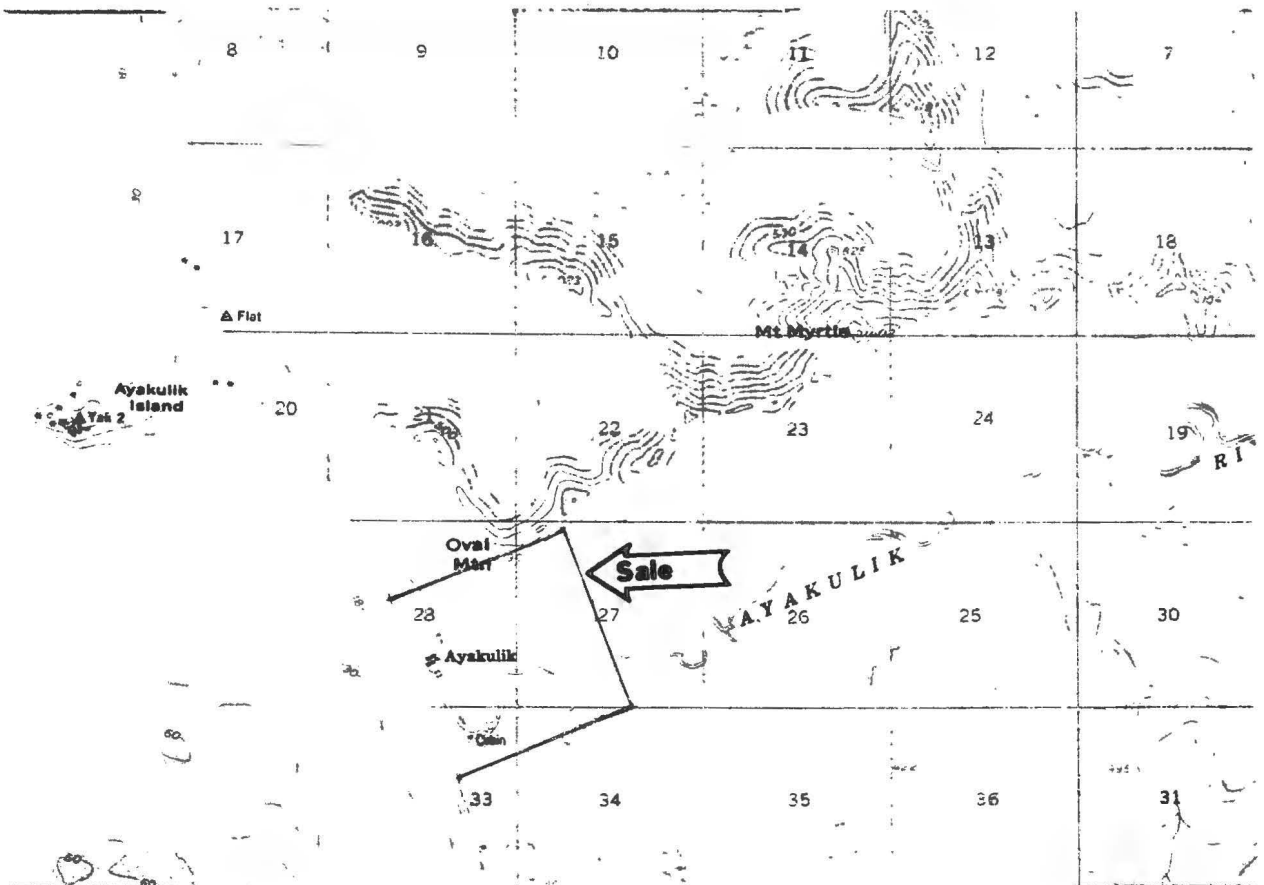
BASIS FOR PURCHASE PRICE: Negotiated. Reportedly Board of Directors approved transaction but one shareholder objected as he thought they should hold out for \$1.5 Million.

BUYER/SELLER MOTIVATION: Buyer desired to limit access to valley located behind this parcel. Land is considered excess to sellers needs.

COMMENTS:

This offer to purchase was turned down by the sellers. This parcel is very desirable as a lodge location, because it is at the mouth of the Ayakulik River, a world class salmon fishing stream. The topography is rolling with the river bisecting the site, and sufficient room for an airstrip. There is a fish and game cabin and weir on the site. Bob Putz indicated that the Conservation Fund desired to effectively block access to the valley located behind this parcel. They also did not want to see the river frontage subdivided into numerous 10 acre tracts with subsequent hunting and guide operations. Mr. Putz indicated that they would not pay more than \$1 Million as they had alternate sites they were trying to preserve. However, the site was appraised for \$1 Million and Mr. Putz indicated they had escrowed the \$1 Million in anticipation of the sale finally consummating. The Conservation Fund will donate the site to the Park Service for inclusion into KNWR. The site is not subject to 22G restrictions.

COMPARABLE NO. 10



COMPARABLE LAND SALE NO. 11

DATE OF SALE: 7-7-92 **SIZE (ACRE):** 153.67 **PRICE/ACRE:** \$651 **RECORD NO.:** 11

STATE: Alaska **RECORDING DISTRICT:** Haines

USGS QUAD MAP NO.: Skagway A-2, A-3

REGION: Southeastern

SUB-REGION: Haines

COMMUNITY/NEIGHBORHOOD: Glacier Point at Chilkat Inlet

LOCATION: Ten miles south of Haines at Glacier Point, Alaska

LEGAL DESCRIPTION: Lot 3, Section 18, and Lot 3, Section 19, T32S, R60E, CRM, and Lot 5, Section 13, and Lot 7, Section 24, T32S, R59E, CRM, Haines, Alaska

RIGHTS CONVEYED: Fee simple except for oil and gas

GRANTOR: Glacier Point Properties, Ltd., Bernard Poirier

GRANTEE: Robert Durett, et al

TAX ID: B-GLP-00-0300

INSTRUMENT: SWD

BOOK/PAGE: 21/991

RECD'G DATE: 8-10-92

SALES PRICE: \$100,000

TERMS: Cash

CEV/ADJ. PRICE: \$100,000

BASIS FOR ADJUSTMENT: None

CONFIRMED WITH: Cory Durett, Grantee

BY/ DATE: DLP/1-94

PRESENT USE: Subd. for recreational

INTENDED USE: Speculation

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Level

PHYSICAL ACCESS: Boat, plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Good, with alluvial sand and gravel

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Ocean - 2,600 feet

VEGETATION: Spruce and cottonwoods

MARKET EXPOSURE: Grantee indicates site was listed with Haines realtor, but that they directly negotiated with seller. Unable to confirm sale with grantor.

SUPPLY & DEMAND CHARACTERISTICS: Limited market for large acreage tracts in the Haines area.

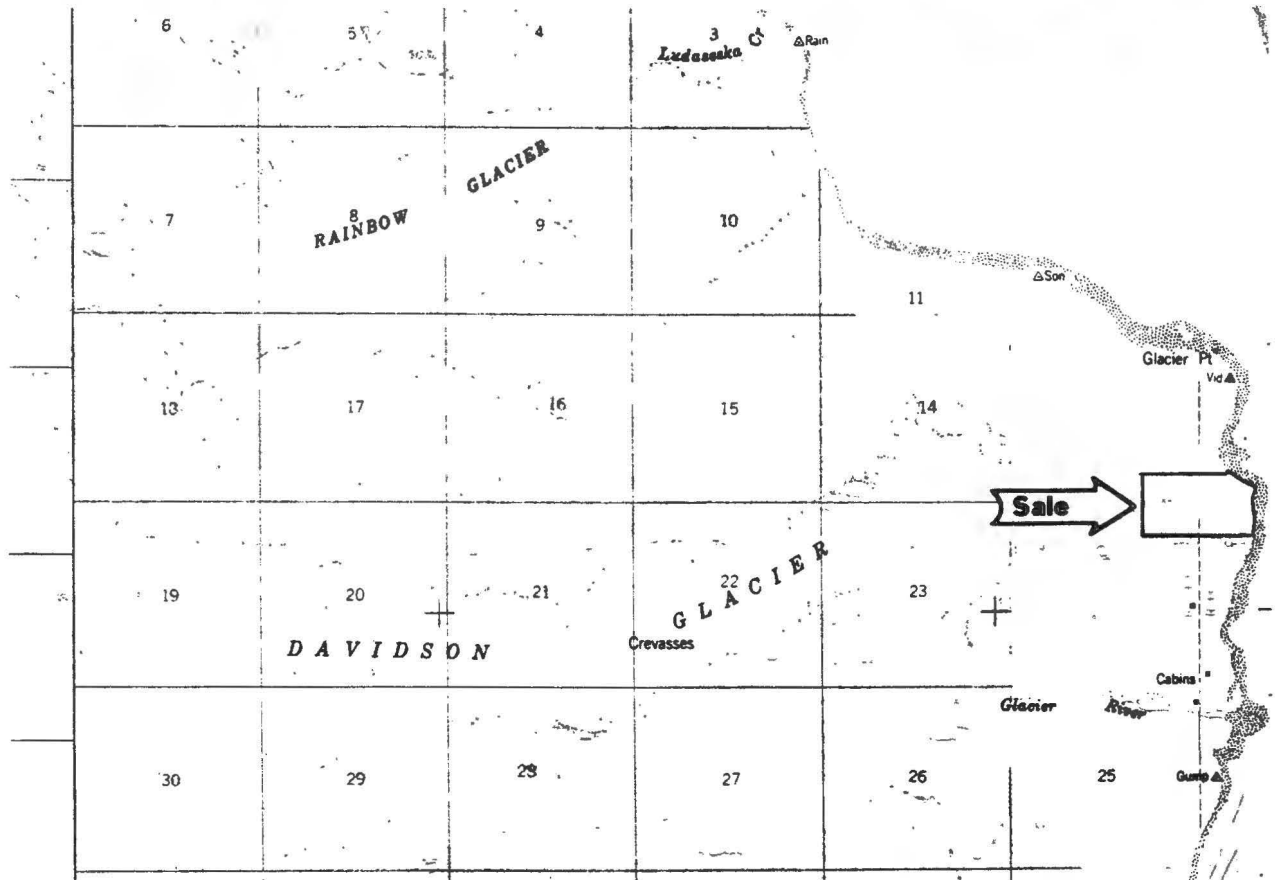
BASIS FOR PURCHASE PRICE: Negotiated. Buyer feels it was fair market value of site.

BUYER/SELLER MOTIVATION: Buyer unsure how they will utilize the site. Buyer reports that the seller was having cash flow problems.

COMMENTS:

Located on the west side of Chilkat Inlet, on the delta immediately below the Davidson Glacier. Site was previously subdivided for recreational cabin sites. There is a small airstrip along the beach. A portion of this airstrip encroaches on the adjoining property. However, according to the grantee there is enough runway on the subject site to accommodate small aircraft. This site had previously sold for \$76,000 or \$495 per acre in July 1989. Terms were undisclosed. Seller foreclosed on the site and sold it to Durett, et al.

COMPARABLE NO. 11



COMPARABLE LAND SALE NO. 12

DATE OF SALE: 10-86 **SIZE (ACRE):** 69.09 **PRICE/ACRE:** \$1,158 **RECORD NO.:** 12

STATE: Alaska **RECORDING DISTRICT:** Seldovia **USGS QUAD MAP NO.:** Seldovia A-5

REGION: Southcentral **SUB-REGION:** Kachemak

COMMUNITY/NEIGHBORHOOD: Chrome Bay

LOCATION: Chrome Point, Port Chatham, Lower Kachemak Bay, Alaska

LEGAL DESCRIPTION: USMS 1422, 2154-A, 2165-A in Section 21, T11S, R15W, SM

RIGHTS CONVEYED: Fee simple, both surface and subsurface

GRANTOR: UMETCO Minerals Corporation (Union Carbide)

GRANTEE: Kenton Bloom, David S. Seaman, et al

TAX ID: 191-060-03 **INSTRUMENT:** Deed **BOOK/PAGE:** 28/912 **RECD'G DATE:** 10-86

SALES PRICE: \$80,000 **TERMS:** Cash

CEV/ADJ. PRICE: \$80,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED WITH: Kenton Bloom, Grantee, 235-4247

BY/ DATE: DLP/1-94

PRESENT USE: Defunct chrome mine

INTENDED USE: Recreational subdivision

IMPROVEMENTS: No value

HIGHEST & BEST USE: Recreation or commercial recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies, moderate to steep

PHYSICAL ACCESS: Boat, Sea plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Good

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: Ocean

VEGETATION: Wooded, mod. density spruce

MARKET EXPOSURE: Listed for six months with an Anchorage broker.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers for properties of this size.

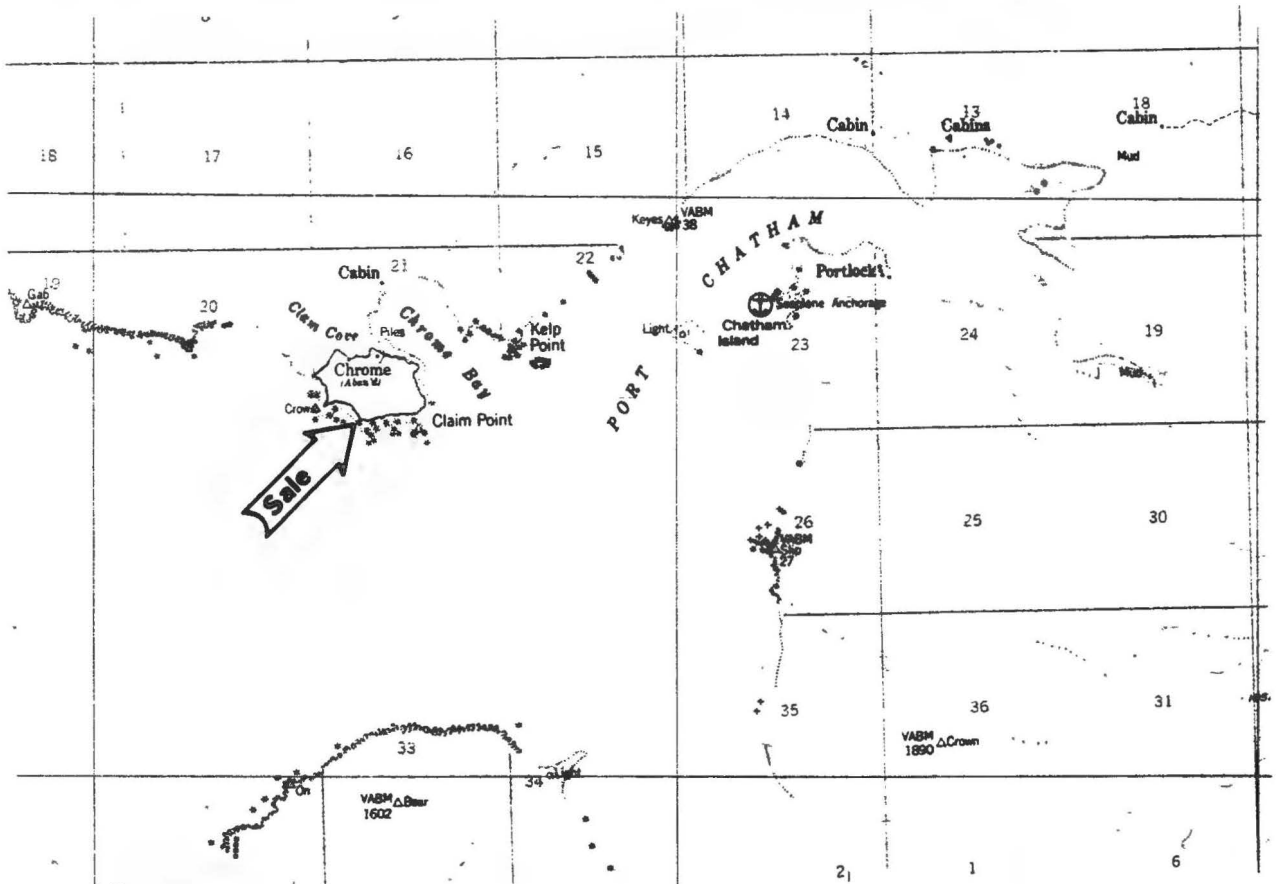
BASIS FOR PURCHASE PRICE: Seller firm, sold for asking price.

BUYER/SELLER MOTIVATION: Seller restructuring assets. Buyer subdivided into recreational subdivision. Buyer felt price was below market.

COMMENTS:

The buyer subdivided the site and has sold eight lots since 1987. Two of the original sites are listed for resale. Buyer acquired both surface and subsurface in order to ensure the site would never be mined again. Buyer did not allocate a specific value to the subsurface estate. He did however indicate that he would not have acquired the site unless he received both the surface and subsurface estates. Buyer felt seller was divesting a site that was economically unfeasible to develop. There is approximately 3,657 feet of frontage in Port Chatham Bay. Frontage elevation varies from 0 to 250 feet. Access to this site is somewhat difficult because the route is unprotected from the severe Gulf of Alaska winter storms.

COMPARABLE NO. 12



COMPARABLE LAND SALE NO. 13

DATE OF SALE: 08-13-90 **SIZE (ACRE):** 74.96 **PRICE/ACRE:** \$1,135 **RECORD NO.:** 13

STATE: Alaska **RECORDING DISTRICT:** Homer **USGS QUAD MAP NO.:** Iliamna D-1

REGION: Southcentral **SUB-REGION:** West Cook Inlet

COMMUNITY/NEIGHBORHOOD: Chinitna Bay

LOCATION: South shore of Chinitna Bay, west side of Cook Inlet, Alaska

LEGAL DESCRIPTION: Lot 7, USS 8355 within Section 15, Township 4 South, Range 22 West, Seward Meridian

RIGHTS CONVEYED: Fee simple surface estate

GRANTOR: Raymond J. Juliussen

GRANTEE: Les D. Vandever

TAX ID: 231-110-15 **INSTRUMENT:** WD **BOOK/PAGE:** 18/960 **RECD'G DATE:** 08-01-90

SALES PRICE: \$85,101 **TERMS:** Cash

CEV/ADJ. PRICE: \$85,101 **BASIS FOR ADJUSTMENT:** None

CONFIRMED WITH: Gary Fandel, KPB Assessor
Gary Fandel, KPB Assessor
Rose Brady and Pearl Chanar, BIA Realty

BY/ TRD/10-90 & 04-91
DATE: DLP/01-94
DLP/01-94

PRESENT USE: Vacant

INTENDED USE: Commercial recreation (future lodge)

IMPROVEMENTS: None

HIGHEST & BEST USE: Rural Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Sloping

PHYSICAL ACCESS: Boat or float/wheel plane

SITE SHAPE: Trapezoidal

ROAD IMPROVEMENTS: Unimproved

SOILS: Good

UTILITIES: None

EASEMENTS: None

ZONING: Unzoned

WATERFRONT: Ocean

VEGETATION: Wooded

MARKET EXPOSURE: Advertised four to six weeks.

SUPPLY & DEMAND CHARACTERISTICS: Market has several buyers and sellers at any given time.

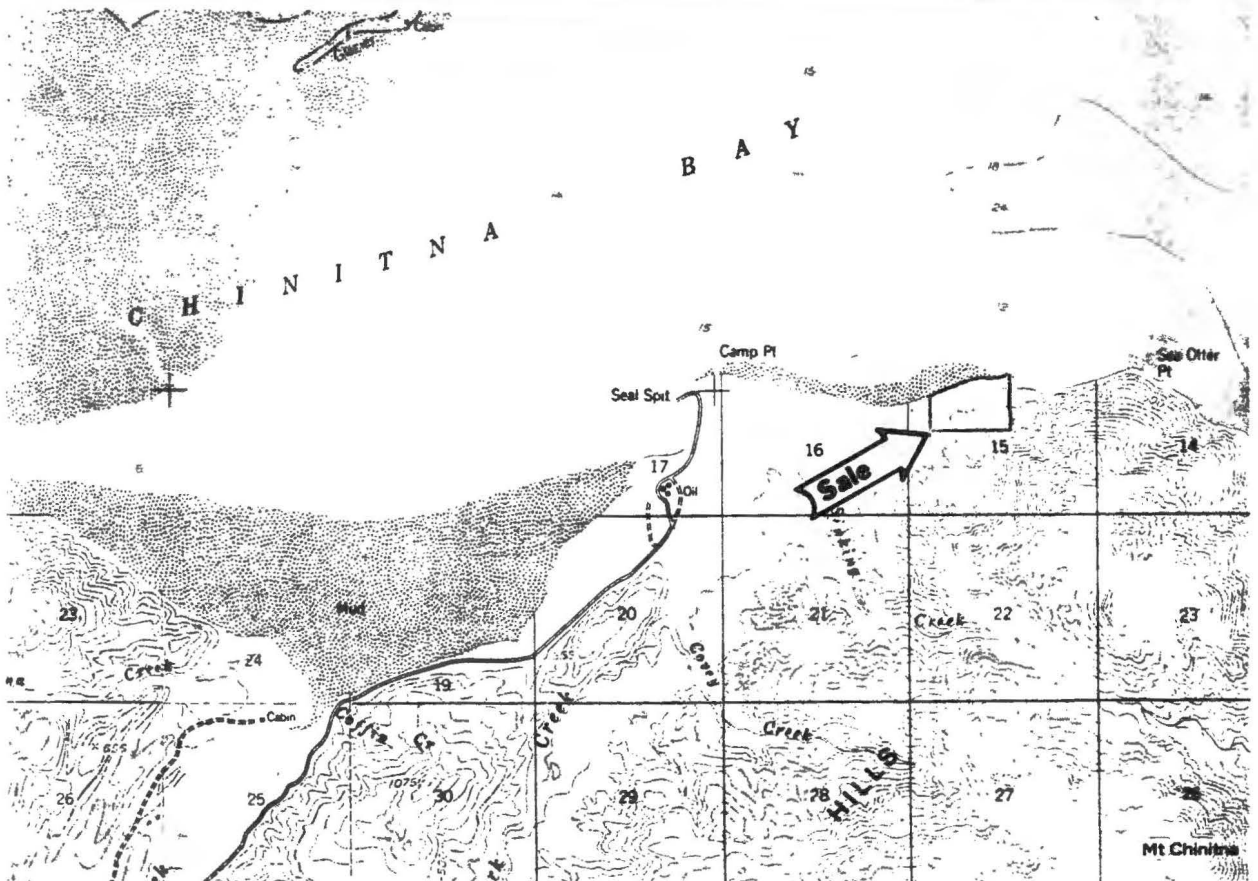
BASIS FOR PURCHASE PRICE: Fair market value as established by BIA appraisal.

BUYER/SELLER MOTIVATION: It is believed seller lived out of area and land was surplus to his needs. Buyer indicated intent to develop lodge on the site.

COMMENTS:

This wooded site slopes gently towards Chinitna Bay. It is about 50 miles west of Homer and has extensive frontage in relation to depth. Beach is gravel type. Access is by boat or plane. Property was native allotment. Unable to confirm with grantor and grantee. This site may have several potential uses given its water frontage and back land. A portion of this site is suitable for a lodge. However, most of the development in the area is remote single-family. Almost three and one-half years later no lodge has been developed on the site.

COMPARABLE NO. 13



COMPARABLE LAND SALE NO. 14

DATE OF SALE: 6-14-91 **SIZE (ACRE):** 80 **PRICE/ACRE:** \$875 **RECORD NO.:** 14

STATE: Alaska **RECORDING DISTRICT:** Iliamna **USGS QUAD MAP NO.:** Iliamna D-5

REGION: Western Alaska **SUB-REGION:** Lake Iliamna

COMMUNITY/NEIGHBORHOOD: Eagle Bay

LOCATION: Eagle Bay, northern shore of Lake Iliamna, Alaska

LEGAL DESCRIPTION: Lot 1, U.S. Survey No. 7127, Section 2 and 11, T5S, R32W, Seward Meridian

RIGHTS CONVEYED: Fee simple estate except for oil and gas.

GRANTOR: Alexan S. Paisely

GRANTEE: Joe Hess

TAX ID: Not taxed

INSTRUMENT: WD

BOOK/PAGE: 18/809

RECD'G DATE: 7-23-91

SALES PRICE: \$70,000

TERMS: Cash

CEV/ADJ. PRICE: \$70,000

BASIS FOR ADJUSTMENT: None

CONFIRMED John Cress, BIA

WITH: Kim Paisley, JKP Realty, Listing Agent

Bernie Vockner, OMB Remote Properties, Selling Agent

BY/ KRH/12-91

DATE: DLP/01-94

DLP/01-94

PRESENT USE: Vacant

INTENDED USE: Recreational Subdivision

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Flat to rolling

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Poor to fair

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Lake

VEGETATION: Mostly tundra, some willow and scrub brush.

MARKET EXPOSURE: Listed for sale for over nine months.

SUPPLY & DEMAND CHARACTERISTICS: Close to Iliamna, many recreational uses, fairly active market with intermittent demand and competing sites.

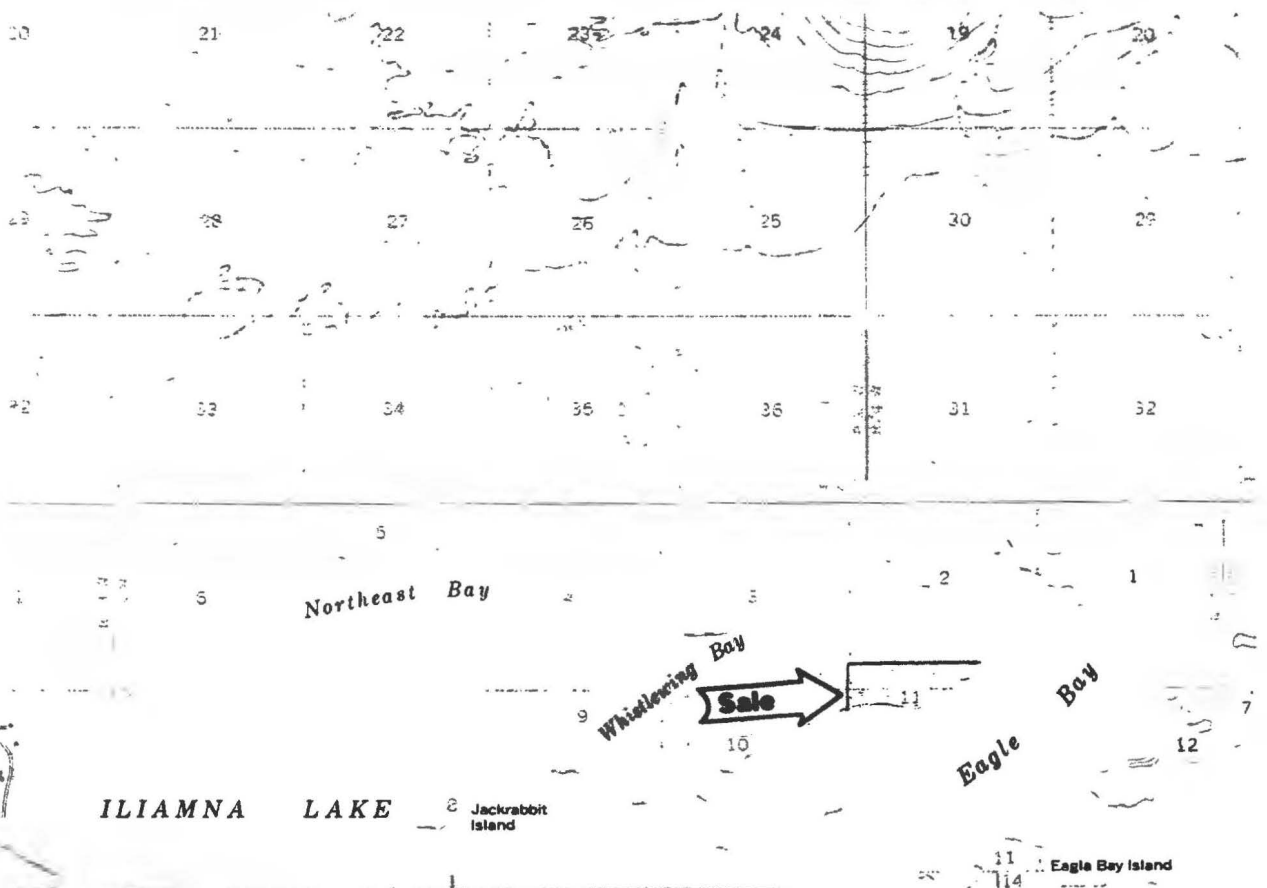
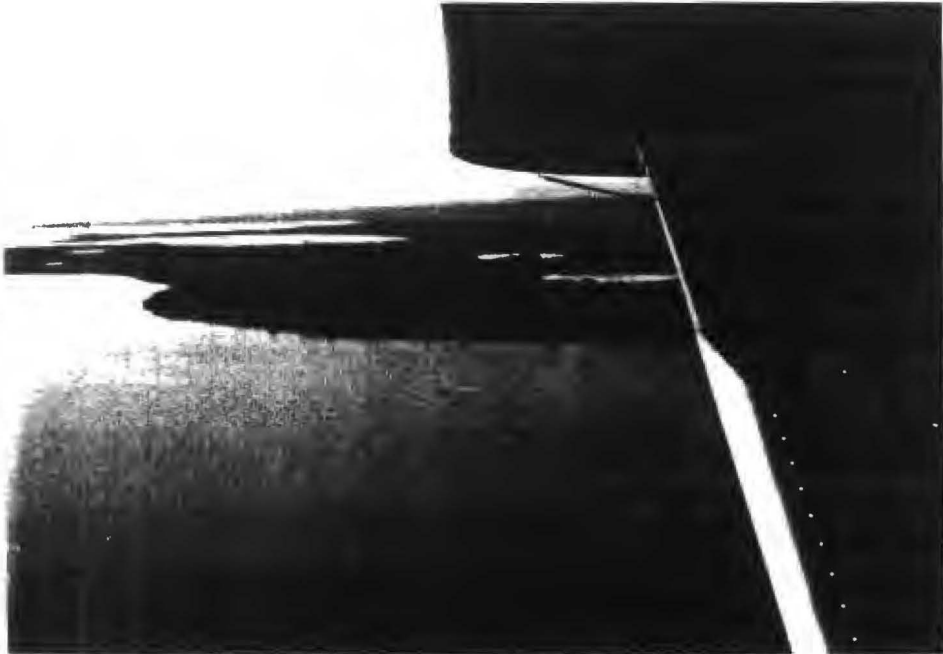
BASIS FOR PURCHASE PRICE: Negotiated, considered arms-length.

BUYER/SELLER MOTIVATION: Seller owned several parcels. Buyer intended to subdivide and sell recreational lots.

COMMENTS:

The seller immediately subdivided the site and listed it with Bernie Vockner. Mr. Vockner indicated that there has been no sales after more than one year on the market. Mr. Vockner had heard rumors that the owner may have sold two or three of the sites himself. The site was part of a native allotment.

COMPARABLE NO. 14



COMPARABLE LAND SALE NO. 15

DATE OF SALE: 2-22-94 **SIZE (ACRE):** 159.97 **PRICE/ACRE:** \$656 **RECORD NO.:** 15

STATE: Alaska **RECORDING DISTRICT:** Iliamna **USGS QUAD MAP NO.:** Lake Clark B-4

REGION: Western Alaska **SUB-REGION:** Lake Clark

COMMUNITY/NEIGHBORHOOD: Lake Clark

LOCATION: North side of Lake Clark near Kijik Lake, Alaska

LEGAL DESCRIPTION: U.S. Survey No. 7952, Lot 2

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Phillip Balluta

GRANTEE: Tawnja Powers

TAX ID: **INSTRUMENT:** MOA **BOOK/PAGE:** 21/836 **RECD'G DATE:** 5-23-94

SALES PRICE: \$105,000 **TERMS:** \$55,000 down, 8% interest and five year term.

CEV/ADJ. PRICE: \$105,000 **BASIS FOR ADJUSTMENT:** None - large down with short term.

CONFIRMED Recorded Documents
WITH: Bernie Vockner, Listing Agent

BY/ DLP/8-94
DATE: DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Private recreation

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Rolling

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Unconfirmed

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: One-half mile Lake Clark frontage

VEGETATION: Unconfirmed

MARKET EXPOSURE: Very short marketing time of 38 days.

SUPPLY & DEMAND CHARACTERISTICS: Many recreational uses, fairly active market with intermittent demand and competing sites.

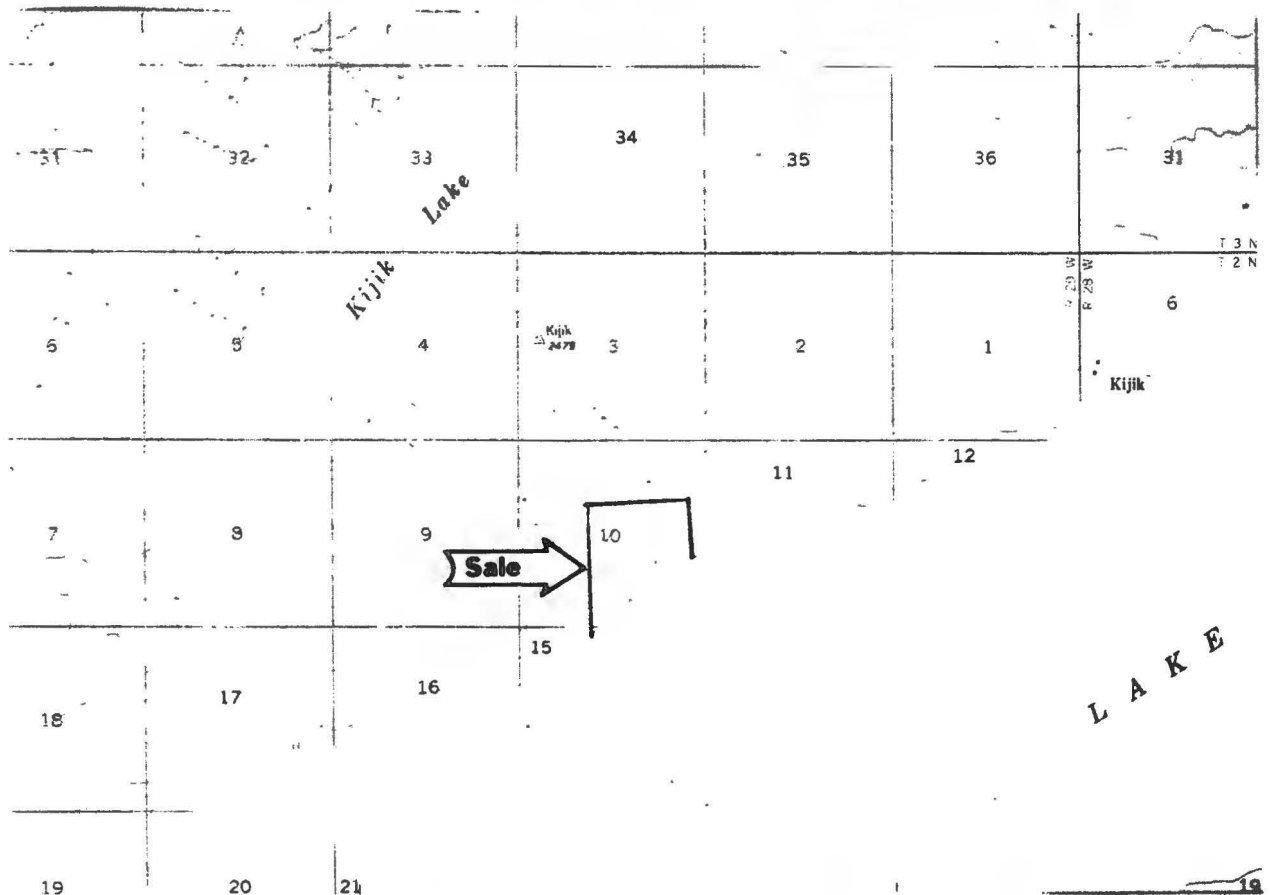
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Seller was living in tar paper shack in South Naknek. Buyer plans to construct a summer home.

COMMENTS:

Purchase price and financing terms were confirmed from the recorded sales agreement documents. Unable to locate either buyer or seller. Other details of sale were confirmed by Bernie Vockner, Listing Agent in a letter he wrote to Steve Carlson.

COMPARABLE NO. 15



COMPARABLE LAND SALE NO. 16

DATE OF SALE: 7-15-93 **SIZE (ACRE):** 79.95 **PRICE/ACRE:** \$1,126 **RECORD NO.:** 16

STATE: Alaska **RECORDING DISTRICT:** Bristol Bay **USGS QUAD MAP NO.:** Dillingham A-5

REGION: Southcentral **SUB-REGION:** Bristol Bay

COMMUNITY/NEIGHBORHOOD: Aleknagik

LOCATION: North bank of Lake Aleknagik, six miles west of the community of Aleknagik.

LEGAL DESCRIPTION: U.S. Survey No. 9288, Lot 1

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Elsie Chythlook

GRANTEE: Mark A. Vingoe et al

TAX ID: **INSTRUMENT:** W D **BOOK/PAGE:** 40/884 **RECD'G DATE:** 9-03-93

SALES PRICE: \$90,000 **TERMS:** Cash

CEV/ADJ. PRICE: \$90,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED WITH: J. Richard Larson, BIA Files
Vicky Kirby and Allan Backford, BBNA Realty
Carol Boquard, Grantee

BY/ DATE: DLP/8-94
DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Personal recreation and possible subdivision

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation/Rural Residential

LEGAL ACCESS: Yes

TOPOGRAPHY: Undulating

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Predominately good with 10-15% wet

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Estimated to have three miles of lake frontage

VEGETATION: Dense spruce and birch

MARKET EXPOSURE: Advertised four weeks prior to BIA auction where no bids were received, Site was then advertised locally until sale one year later.

SUPPLY & DEMAND CHARACTERISTICS: Many recreational uses, limited market activity with intermittent demand and competing sites.

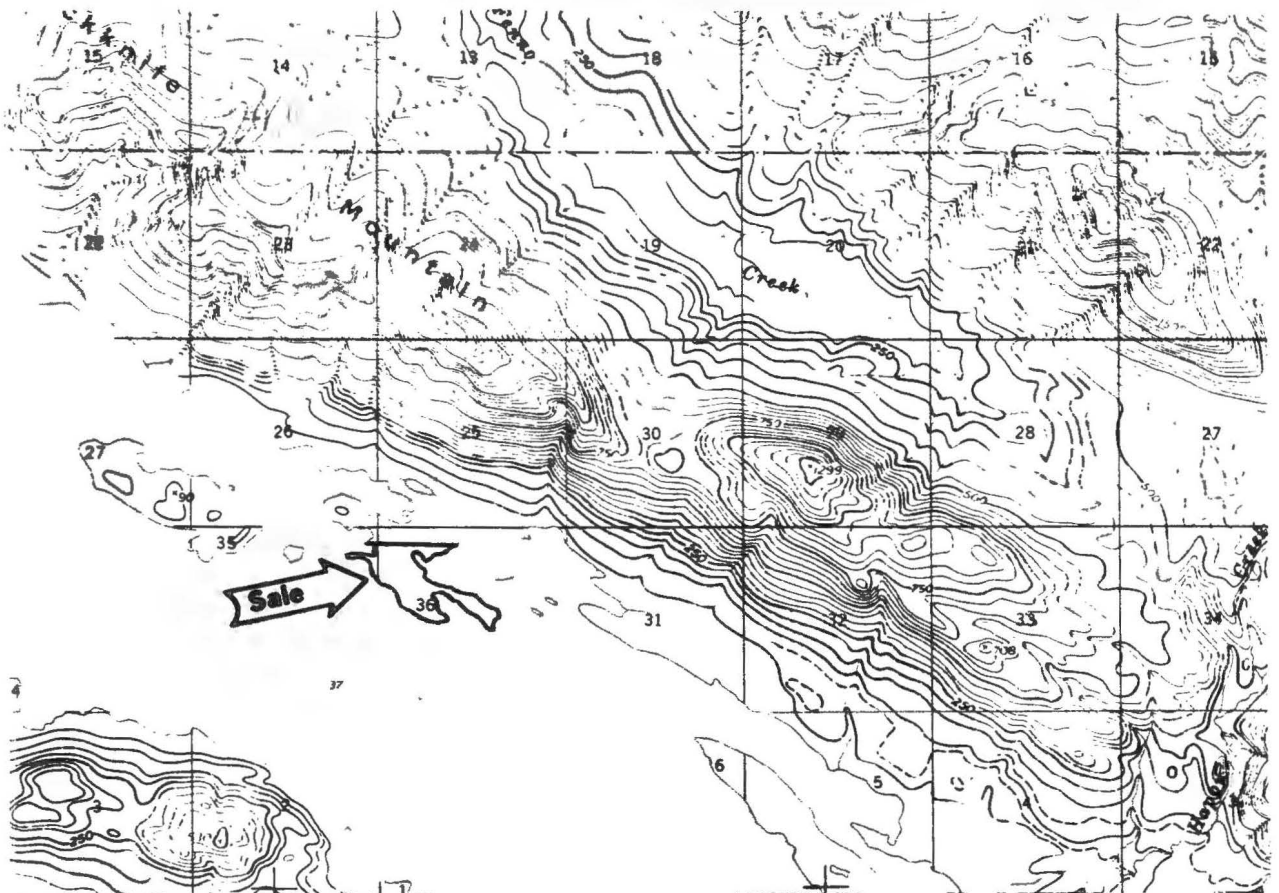
BASIS FOR PURCHASE PRICE: Native allotments cannot by law sell below appraised value.

BUYER/SELLER MOTIVATION: Seller desired to finance sons education. Buyers constructing a personal cabin and are considering subdividing the site to sell recreational lots.

COMMENTS:

This parcel has excellent subdivision potential because of the numerous fingers provided by the jogging shoreline. Amenities include good views, hunting and fishing characteristics. There is a youth camp approximately one mile away that limits it's desirability as a lodge site. Grantee indicates that there are numerous bears on the parcel that keep tearing up the grantees campsites.

COMPARABLE NO. 16



COMPARABLE LAND SALE NO. 17

DATE OF SALE: 6-86 **SIZE (ACRE):** 78.42 **PRICE/ACRE:** \$1,090 **RECORD NO.:** 17

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak C-5

REGION: Southcentral **SUB-REGION:** Kodiak Island

COMMUNITY/NEIGHBORHOOD: Uganik Bay

LOCATION: Uganik Bay, north end of Kodiak Island

LEGAL DESCRIPTION: USS 3879, Portions A & D

RIGHTS CONVEYED: Fee simple estate including subsurface.

GRANTOR: D. Reed (486-3709)

GRANTEE: Herman Fox, et al

TAX ID: **INSTRUMENT:** QCD **BOOK/PAGE:** 81/518 **RECD'G DATE:** 8-86

SALES PRICE: \$90,500 **TERMS:** 50% down balance was owner financed.

CEV/ADJ. PRICE: \$85,500 **BASIS FOR ADJUSTMENT:** Adjusted down \$5,000 for contributory value of old buildings on the site.

CONFIRMED WITH: (Grantor and Grantee, KIB Questionnaire
Pat Carlson, KIB Assessor who confirmed for court testimony.

BY/ DATE: WH/11-86
DLP/8-94

PRESENT USE: One-half of Reed Homestead

INTENDED USE: Residential/Fish Site

IMPROVEMENTS: Old buildings \$5,000 value

HIGHEST & BEST USE: Rural Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: poor

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Unconfirmed

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: Uganik Bay water frontage, small creek

VEGETATION: Cottonwood and brush

MARKET EXPOSURE: No market exposure. One friend sold to another.

SUPPLY & DEMAND CHARACTERISTICS: There is limited demand for sites similar to this parcel.

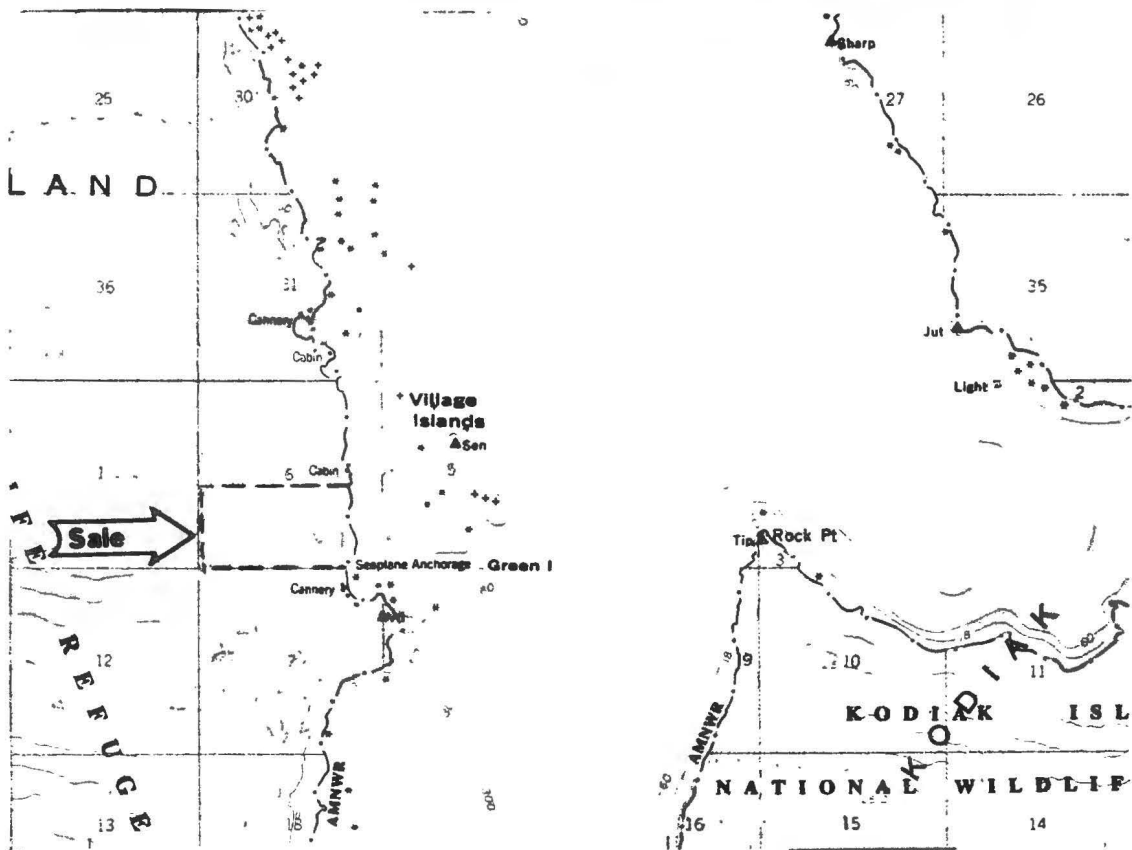
BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Unable to confirm buyer or seller motivations.

COMMENTS:

This is half of the Reed homestead, the topography is poor and the anchorage is good. The sale included numerous old buildings valued at \$5,000. There is a non-anadromous creek on the property. Vegetation is cottonwood and brush.

COMPARABLE NO. 17



COMPARABLE LAND SALE NO. 18

DATE OF SALE:	11-06-89	SIZE (ACRE):	273.63	PRICE/ACRE:	\$3,889	RECORD NO.:	18
----------------------	----------	---------------------	--------	--------------------	---------	--------------------	----

STATE: Alaska	RECORDING DISTRICT: Kodiak	USGS QUAD MAP NO.: Afognak A-4
----------------------	-----------------------------------	---------------------------------------

REGION: Southcentral	SUB-REGION: Kodiak Island
-----------------------------	----------------------------------

COMMUNITY/NEIGHBORHOOD: Afognak Island**LOCATION:** Southwest side of Afognak Island facing Raspberry Straits, Alaska**LEGAL DESCRIPTION:** Tracts A & B, Sheet No. 2 of 2, Plat 89-8-RS, Sections 17 and 20, Township 25 South, Range 22 West, Seward Meridian, Kodiak Rec. Dist.**RIGHTS CONVEYED:** Fee simple surface only**GRANTOR:** Enola Mullan and Mike Mullan**GRANTEE:** Aloneva Joint Ventures

TAX ID: R5425220002/3	INSTRUMENT: MOA	BOOK/PAGE: 977/66	RECD'G DATE: 11-06-89
------------------------------	------------------------	--------------------------	------------------------------

SALES PRICE: \$1,194,375	TERMS: \$200,000 down, 7% interest, \$198,450 per year till paid in full.
---------------------------------	--

CEV/ADJ. PRICE: \$1,064,269	BASIS FOR ADJUSTMENT: The note is discounted at 10% which indicates a CEV of \$1,098,269 less \$34,000 for the cabin.
------------------------------------	--

CONFIRMED WITH: Dick Larson, Bureau of Indian Affairs Sharlene Sullivan, Selling Agent, Associated Island Brokers, Inc.	BY/ DATE: DLP/1-94 DLP/1-94
---	---------------------------------------

PRESENT USE: Vacant	INTENDED USE: Religious community
----------------------------	--

IMPROVEMENTS: Cabin, \$34,000 value	HIGHEST & BEST USE: Rural Residential/Recreation
--	---

LEGAL ACCESS: Yes	TOPOGRAPHY: Gently rolling
--------------------------	-----------------------------------

PHYSICAL ACCESS: Boat, float plane	SITE SHAPE: Irregular
---	------------------------------

ROAD IMPROVEMENTS: None	SOILS: Good
--------------------------------	--------------------

UTILITIES: None	EASEMENTS: Normal
------------------------	--------------------------

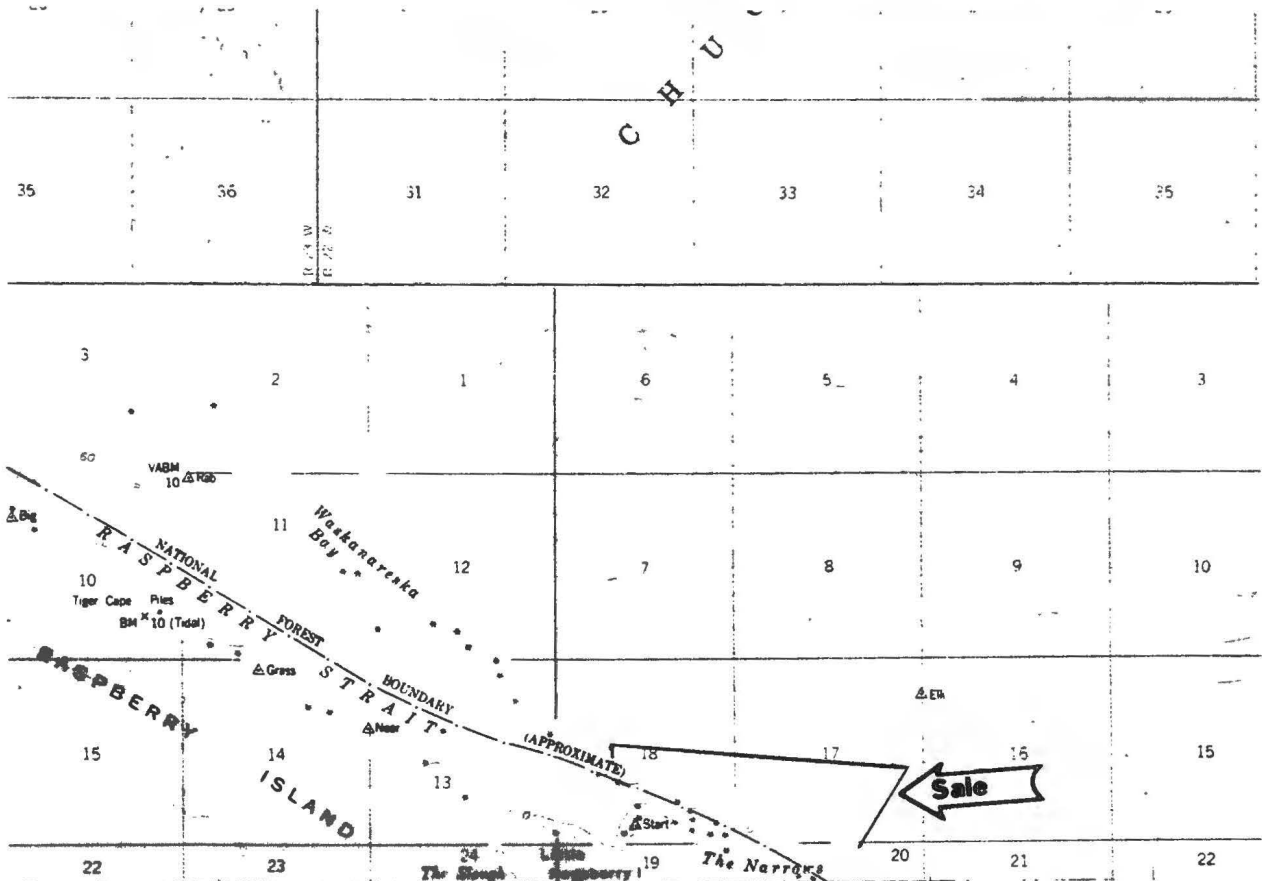
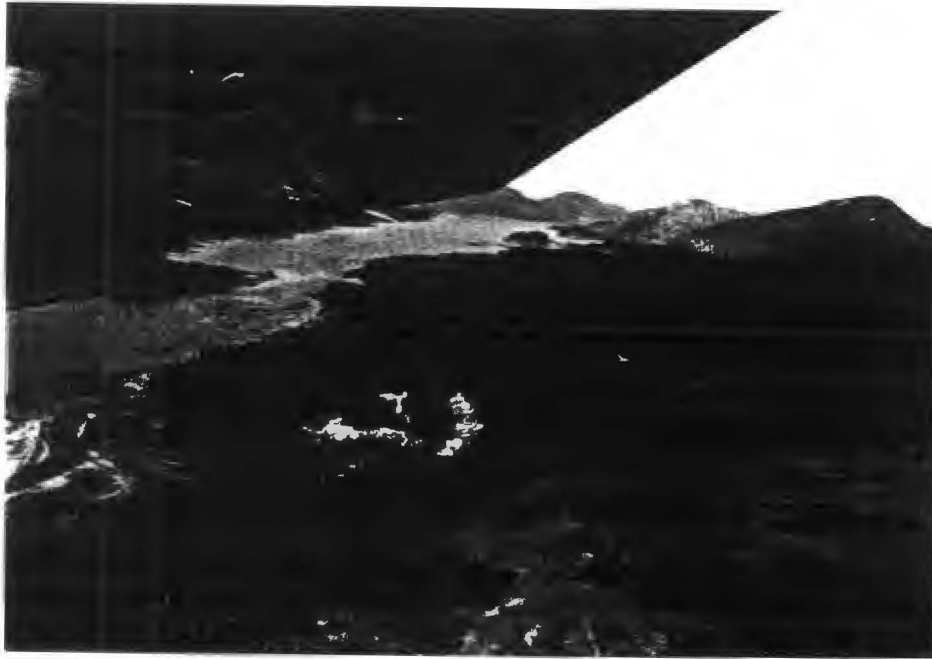
ZONING: Conservation/5 acre	WATERFRONT: Ocean
------------------------------------	--------------------------

VEGETATION: Densely wooded forest**MARKET EXPOSURE:** Not advertised, buyer approached seller who asked Ms. Sullivan to assist in the sale. The transaction took over two years to finalize.**SUPPLY & DEMAND CHARACTERISTICS:** Ms. Sullivan does not believe there is any other parcel that would have satisfied the purchaser. See comments.**BASIS FOR PURCHASE PRICE:** Negotiation. Price was negotiated prior to any appraisal. Ms. Sullivan indicated both parties believed this was market value.**BUYER/SELLER MOTIVATION:** The seller's are both elderly and would prefer living closer to medical facilities. Buyer motivation listed in comments section.**COMMENTS:**

Supply & Demand Characteristics (Con't): The buyer had approached many private individuals and native corporations about acquiring a large site similar to this parcel. Until finding this comparable they were unable to locate a parcel that satisfied all of their needs. The purchaser desired a remote site that was large enough to satisfy their future needs and would isolate them from other people. It must have extensive ocean frontage and protected coves for their fishing fleet. The beaches had to be easily accessible and not too steep. Finally they were looking for an area that had good fishing and hunting to satisfy their subsistence lifestyle. Ms. Sullivan indicated that they had found no other site that offered all of these amenities.

The site is irregularly shaped, has approximately one and one-half miles of waterfront and has marketable timber. The timber resource was a significant portion of value, although the exact amount cannot be released. However subsequent market analysis conducted by Koncor indicates that the cost to harvest the timber at the date of purchase was greater than the value of the timber because helicopters would be required for logging to occur. Ms. Sullivan does not believe the buyers intend to commercially harvest the timber as that is not compatible with their subsistence and isolation needs. Timber value was not a motivation for the purchase. The site goes completely dry at low tide and there is no deep water access to the uplands. The limited access to the uplands was part of the reason the logging was economically unfeasible. The property is in a fairly well protected area fronting Raspberry Strait Narrows. It is well drained with rolling hillside and in close proximity to good fishing. The property was purchased by a Russian religious group formerly known as the Old Believers for the establishment of a new community.

COMPARABLE NO. 18



COMPARABLE LAND SALE NO. 19

DATE OF SALE: 7-92 **SIZE (ACRE):** 159.97 **PRICE/ACRE:** \$676 **RECORD NO.:** 19

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Karluk C-2

REGION: Southcentral **SUB-REGION:** Kodiak Island

COMMUNITY/NEIGHBORHOOD: Karluk/Sturgeon River

LOCATION: Approximately 2.5 miles up the Sturgeon River from Shelikoff Strait on the southwest side of Kodiak Island. Approximately 5 miles south of Karluk.

LEGAL DESCRIPTION: USS 6724 in Section 12, T31S, R33W, SM

RIGHTS CONVEYED: Fee simple surface estate

GRANTOR: Estate of David W. Waeslie

GRANTEE: Mike Cusak, Jr., Alaska Outdoor Experiences (277-3033)

TAX ID: R5612000001 **INSTRUMENT:** MOA **BOOK/PAGE:** 115/18 **RECD'G DATE:** 8-27-92

SALES PRICE: \$126,000 **TERMS:** \$16,345 down (13%), balance carried by seller at 8% for 30 years.

CEV/ADJ. PRICE: \$108,167 **BASIS FOR ADJUSTMENT:** The note was discounted at 10%, indicating a present value of the interest savings of \$17,833.

CONFIRMED WITH: Dick Larson, BIA
Bob Brody, Listing Agent, Affiliated Island Brokers
Mike Cusak, Jr.

BY/ DATE: DLP/1-94
DLP/1-94
DLP/1-94

PRESENT USE: Vacant **INTENDED USE:** Fishing Lodge

IMPROVEMENTS: None **HIGHEST & BEST USE:** Commercial - Fish/Hunting Lodge

LEGAL ACCESS: Yes **TOPOGRAPHY:** Level to rolling hillsides

PHYSICAL ACCESS: Boat or float plane **SITE SHAPE:** Square

ROAD IMPROVEMENTS: None **SOILS:** Glacial till, sand, marsh, permafrost

UTILITIES: None **EASEMENTS:** Normal

ZONING: Conservation **WATERFRONT:** River - 3,000 feet

VEGETATION: Typical of area with grasses, ferns, willow and alder thickets.

MARKET EXPOSURE: Actively marketed with Associated Island Brokers beginning 1987 until sale in 1992. This included publication in their Remote Properties pamphlet.

SUPPLY & DEMAND CHARACTERISTICS: Adequate number of alternative sites and potential buyers.

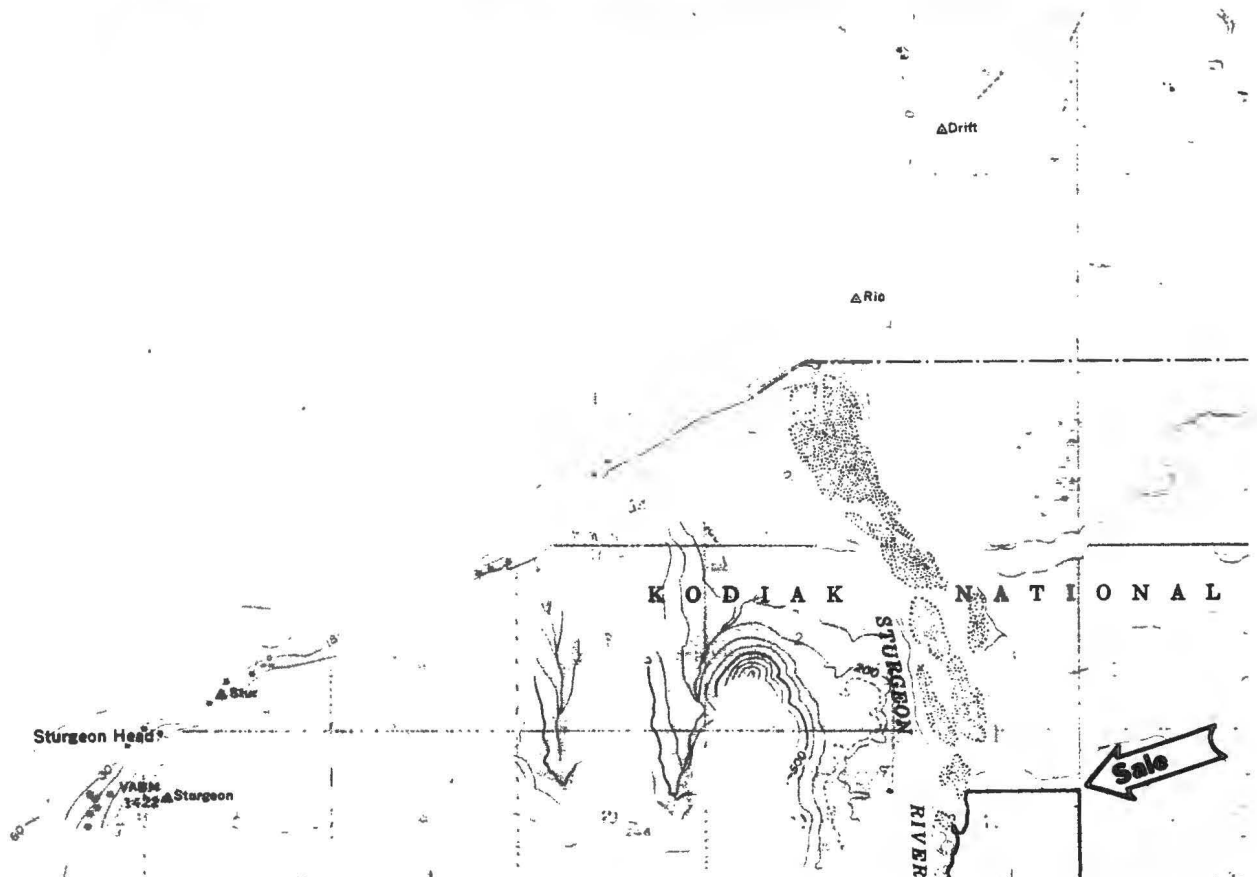
BASIS FOR PURCHASE PRICE: Based on 1987 BIA appraisal performed by Dick Larson. Subsequent appraised value was less but sales price remained at 1987 appraised value.

BUYER/SELLER MOTIVATION: Buyer desired site for its excellent hunting and fishing characteristics. Sellers had inherited site and didn't need it.

COMMENTS:

Fronts on Sturgeon River with good cabin sites along the river and interior acreage. Located within Kodiak National Wildlife Refuge but is not subject to 22G limitations. Purchased for fishing lodge. Fishing and hunting is excellent in this area. As of January 1993 no lodge has been constructed, however there is a cabin constructed on the site. According to Mr. Brody the grantee desired to expand his guiding area beyond his extensive Iliamna guiding operation. Boat access is difficult at low tides. Supposedly the hunting and fishing is excellent because the access is so difficult. Airstrip has been dug down two feet and buyer is not sure when he will complete it. Until the airstrip is operable, the best means of access are by boat and float plane at high tide. There is a lagoon on this portion of the Sturgeon River that the buyer utilizes for float plane access. There are commercial flights that service Karluk. From there the property is a short hop by plane or about 30 minutes by skiff. Buyer indicated that he felt the sales price was below market value, although the site was marketed for five years.

COMPARABLE NO. 19



COMPARABLE LAND SALE NO. 20

DATE OF SALE: 10-92 **SIZE (ACRE):** 180 **PRICE/ACRE:** \$1,722 **RECORD NO.:** 20

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Karluk B-2

REGION: Southcentral **SUB-REGION:** Kodiak Island

COMMUNITY/NEIGHBORHOOD: Olga Bay

LOCATION: East of Dog Salmon River, within Olga Bay, south end of Kodiak Island, Alaska

LEGAL DESCRIPTION: West 1/2 Section 23, T35S, R30W, SM

RIGHTS CONVEYED: Fee simple surface estate only

GRANTOR: Jack Wichers and Duane Stuckle

GRANTEE: Mike Cusak, Jr., Alaska Outdoor Experiences (277-3033)

TAX ID: R5353002303/4/5 **INSTRUMENT:** DFT **BOOK/PAGE:** N/A **RECD'G DATE:** DFT

SALES PRICE: \$310,000 **TERMS:** \$100,000 down, seller offered terms of 10% interest with payments of \$2,000.

CEV/ADJ. PRICE: \$310,000 **BASIS FOR ADJUSTMENT:** None, seller offered terms

CONFIRMED WITH: Jack Wichers, Grantor, (303) 290-9555

BY/ DATE: DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Commercial recreational

IMPROVEMENTS: None

HIGHEST & BEST USE: Multi-use recreational

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies, 140 acres of 1/2 section is underwater.

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: 60% to 70% is well drained, remainder is poorly drained.

UTILITIES: None

EASEMENTS: Typical

ZONING: Conservation

WATERFRONT: 3,250' ocean frontage

VEGETATION: Large cottonwoods on front of parcel.

MARKET EXPOSURE: Site was marketed with Associated Island Brokers for 5 weeks at \$450,000 prior to the sale.

SUPPLY & DEMAND CHARACTERISTICS: There is a very small market for large parcels similar to this site in the Kodiak area.

BASIS FOR PURCHASE PRICE: Price was negotiated. Seller offered terms, deal fell through when the buyer could not make the down payment.

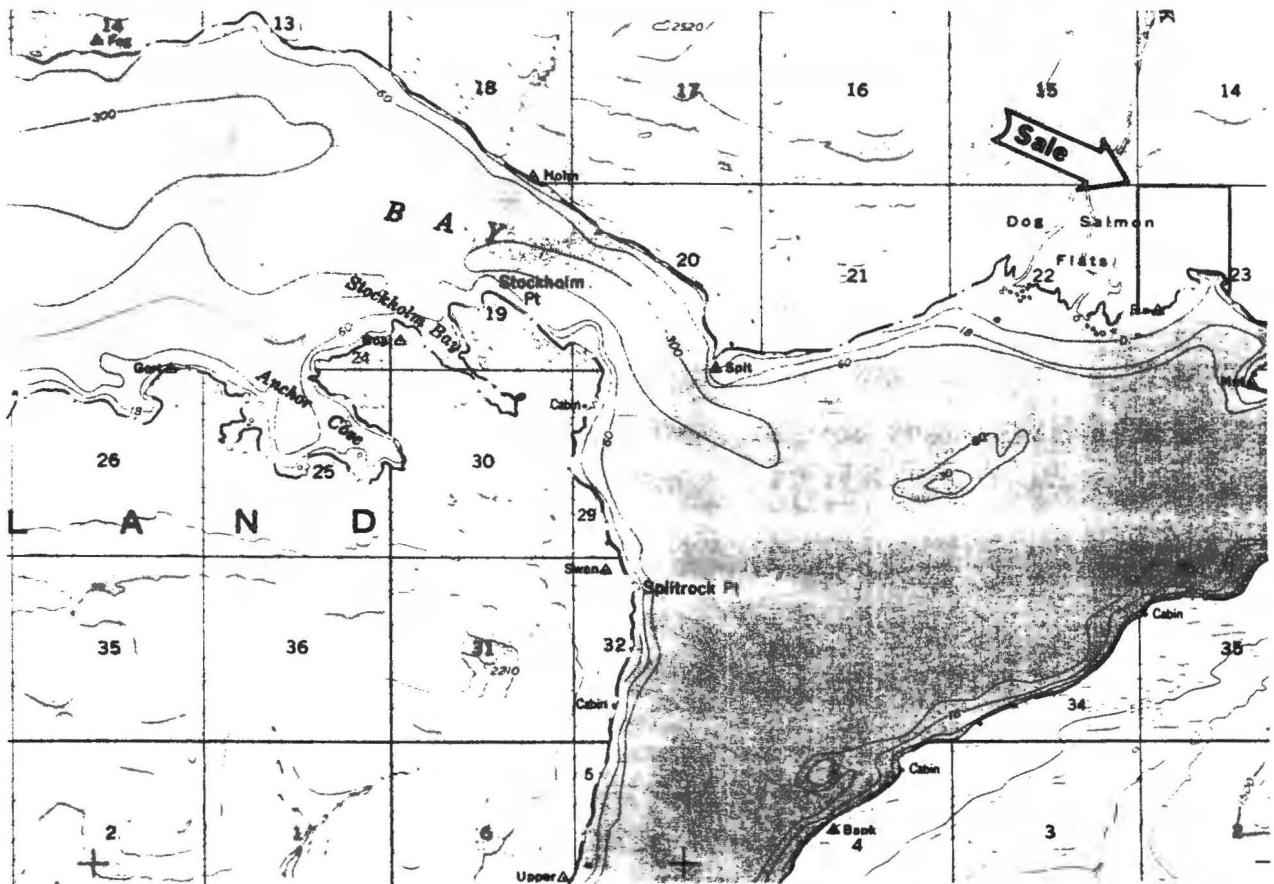
BUYER/SELLER MOTIVATION: Buyer desired site for its excellent hunting and fishing characteristics. Sellers was under no duress to sell this site.

COMMENTS:

This site has extensive frontage on Olga Bay, with good beaches and a small semi-protected bay. This area is renowned for its supreme fishing and hunting. The Dog Salmon River is located 1/4 mile to the west and supports Kodiak Island's largest sockeye salmon run. About 30% to 40% of the site has poorly drained soils with several beaver ponds and small creeks.

The deal fell through when the buyer could not make the original down payment. The site remained list for sale at \$450,000 until April 1993. At that time it was subdivided into four parcels ranging in size from 30 acres to 52 acres. The combined asking price of the smaller parcels is \$450,000, or \$2,500 per acre. No offers have been accepted since the Cusak deal fell through. The seller indicates that the Fish and Wildlife Service has expressed an interest in acquiring the entire parcel. USF&WS had the site appraised in early 1994. The seller felt their offer was significantly below market value. The seller is aware that the Fish and Wildlife Service had paid \$2,500 per acre for the 151 acres located on Uganik Passage.

COMPARABLE NO. 20



COMPARABLE LAND SALE NO. 21

DATE OF SALE:	4-18-94	SIZE (ACRE):	59.98	PRICE/ACRE:	\$3,001	RECORD NO.:	21
----------------------	---------	---------------------	-------	--------------------	---------	--------------------	----

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak D-2
REGION: Southcentral **SUB-REGION:** Kodiak Island
COMMUNITY/NEIGHBORHOOD: Afognak Island
LOCATION: Scutheasterly shore of Afognak Island between mouth of Afognak Bay and Afognak Strait, Alaska
LEGAL DESCRIPTION: U.S. Survey No. 5698, Lot 20, T25S, R22W, SM

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Jacob Lukin 454-2262

GRANTEE: Alex Kalugin et al 235-5109

TAX ID:	INSTRUMENT: MOA	BOOK/PAGE: 977/568	RECD'G DATE: 4-18-94
----------------	------------------------	---------------------------	-----------------------------

SALES PRICE: \$180,000 **TERMS:** \$36,000 down, 10% interest and eight year term.

CEV/ADJ. PRICE: \$180,000 **BASIS FOR ADJUSTMENT:** None - terms are considered to be cash equivalent.

CONFIRMED WITH: Alex Kalugin, Grantee 235-5109

BY/ DATE: DLP/8-94

PRESENT USE: Former village site	INTENDED USE: Russian family acquired to subdivide as personal homesites Desired to be close to Old Believers located three miles away.
IMPROVEMENTS: Old cabin, no value	HIGHEST & BEST USE: Rural Residential/Recreation
LEGAL ACCESS: May not have legal access	TOPOGRAPHY: Flat
PHYSICAL ACCESS: Through adjacent waterfront lot	SITE SHAPE: Irregular
ROAD IMPROVEMENTS: Unimproved	SOILS: Little overburden
UTILITIES: None	EASEMENTS: Normal
ZONING: Conservation	WATERFRONT: None
VEGETATION: Sitka spruce and bushes	

MARKET EXPOSURE: Buyer was informed of availability by the Old Believers colony members who live three miles away.

SUPPLY & DEMAND CHARACTERISTICS: Buyer indicates this was the closest available site to the Old Believers colony. Other sites are available but not proximal.

BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Buyers desired to establish residences near the Old Believers religious colony. According to buyer the seller was elderly and needed money.

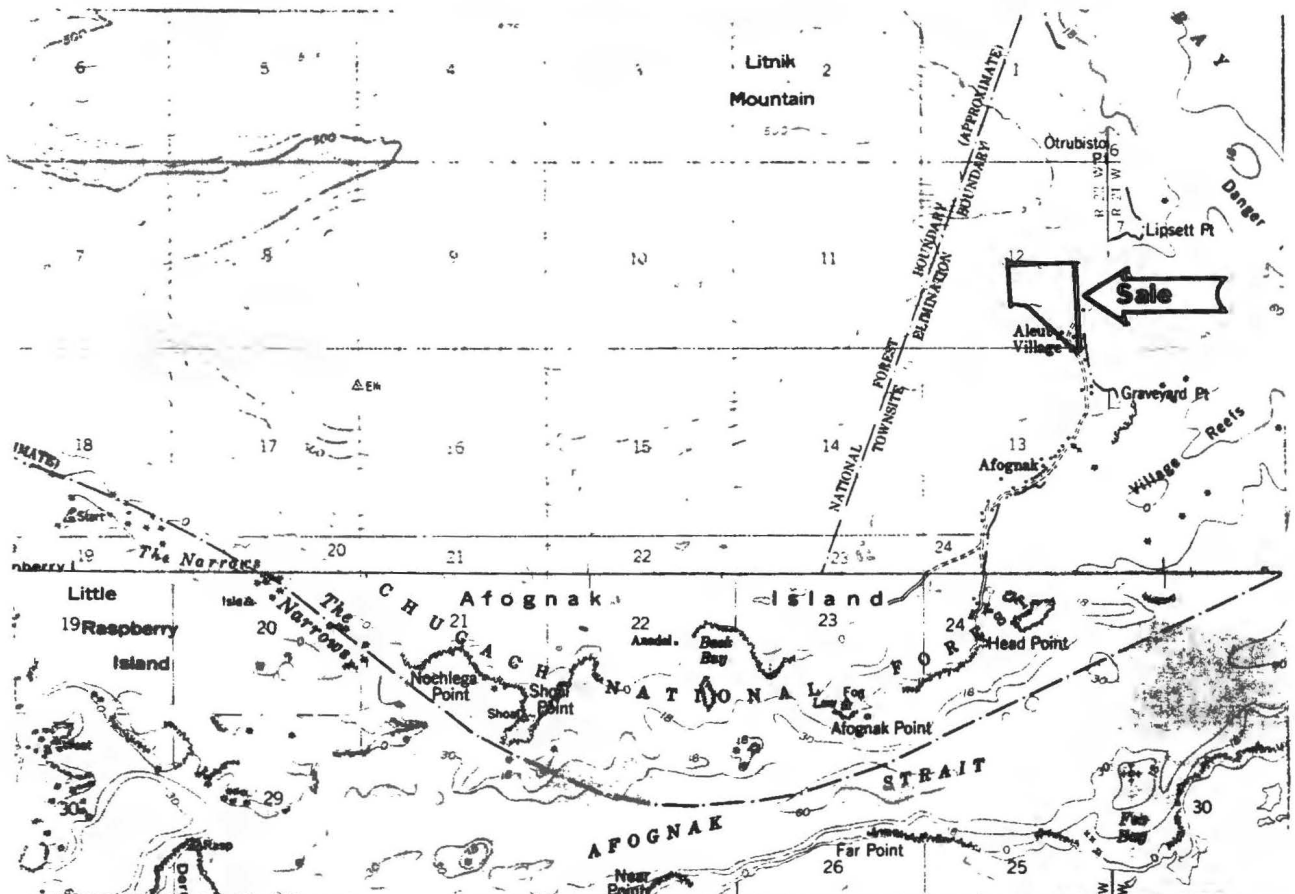
COMMENTS:

This parcel has good fishing and hunting amenities and it is adjacent to public domain land, two amenities the buyer desired. As the site is land locked, access is gained by crossing the adjacent Kodiak Island Borough owned former village school site from the water. Buyers claim that Borough has agreed to lease them an easement to cross their site to the water. Buyer desired to acquire the easement, however Borough did not want to sell. No lease payment or term has been determined. Bud Cassidy of the Kodiak Island Borough indicates that the Borough may not be able to grant an easement as they received title which limited the use to school site or public use only. Mr. Cassidy raised this issue with State officials who claimed that the ownership is with the Borough. Thus, the Borough is unsure if they have the legal right to grant an easement to the Kalugin's. Legal access to the site is unclear at this time. Waterfront access along this area is poor due to the extreme tides which limit accessibility. Also this waterfront area is subject to severe winter storms.

The parcel contains some areas of ponding water left over from the 1964 tsunami that also vacated the now abandoned community of Afognak Village. Most of the site is well drained. The site has many large trees. The site had a high timber value. Buyer said they did not allocate a timber value in the purchase price. However, they will use some of the timber to build personal residences. The water front in this area suffers from severe winter storms.

Buyers desired to be close to the Old Believers religious colony. They were unaware of any other sites close to the colony. This religious group desires to be separate from the general public and external influences upon their beliefs.

COMPARABLE NO. 21



COMPARABLE LAND SALE NO. 22

DATE OF SALE: Listing **SIZE (ACRE):** 159.99 **PRICE/ACRE:** \$2,200 **RECORD NO.:** 22

STATE: Alaska **RECORDING DISTRICT:** Kodiak **USGS QUAD MAP NO.:** Kodiak B-6

REGION: Southcentral **SUB-REGION:** Kodiak Island

COMMUNITY/NEIGHBORHOOD: Uyak Bay

LOCATION: West shore of Uyak Bay, Kodiak Island, Alaska

LEGAL DESCRIPTION: U.S. Survey No. 9434

RIGHTS CONVEYED: Fee simple surface estate only.

GRANTOR: Alberta E. Aga

GRANTEE: Available for purchase

TAX ID: **INSTRUMENT:** N/A **BOOK/PAGE:** N/A **RECD'G DATE:** N/A

SALES PRICE: \$352,000 **TERMS:** Cash equivalent financing available, typical terms are 15 to 20% down, at 10% interest and a 15 to 20 year term.

CEV/ADJ. PRICE: \$352,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED WITH: FIA Bid Package and Rose Brady
J. Richard Larson

BY/ DATE: DLP/8-94
DLP/8-94

PRESENT USE: Vacant

INTENDED USE: Unknown

IMPROVEMENTS: None

HIGHEST & BEST USE: Rural Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Sloping

PHYSICAL ACCESS: Boat or float plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Predominately good with 10-15% wet

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Extensive Uyak Bay frontage

VEGETATION: Alders, forbs, grasses, cotton wood and willow. No merchantable timber.

MARKET EXPOSURE: Advertised four weeks prior to BIA auction where no bids were received. Site has been listed with BIA Realty since August 1994.

SUPPLY & DEMAND CHARACTERISTICS: Limited market activity with intermittent demand and competing sites.

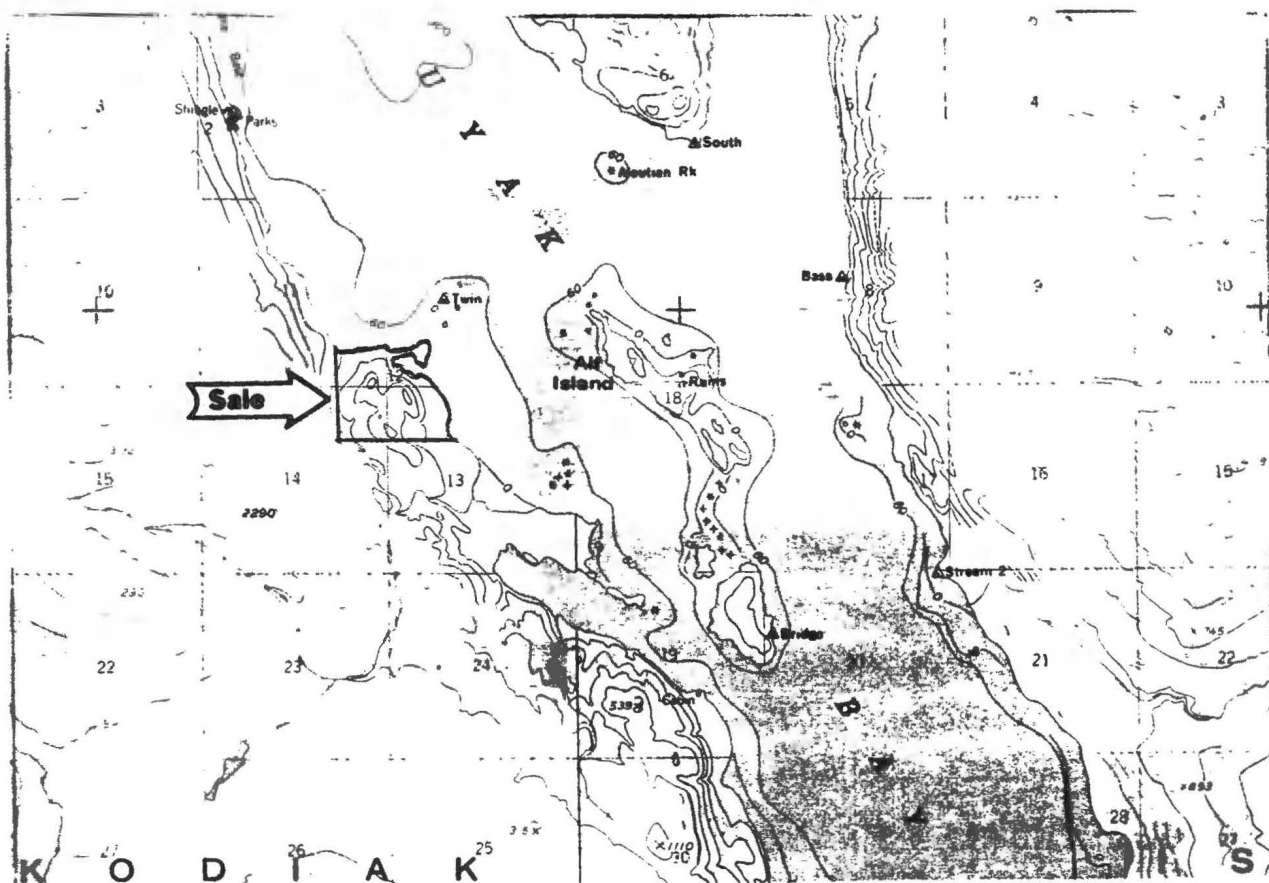
BASIS FOR PURCHASE PRICE: Site is available for purchase.

BUYER/SELLER MOTIVATION: Land excess to sellers needs.

COMMENTS:

This parcel has very good deep water frontage and is suitable for several uses. There is no merchantable timber but the site has dense surface vegetation including cottonwood and willow. It's location allows easy access to other good recreation areas like Larsen Bay, etc.,

COMPARABLE NO. 22



PART IV - ADDENDA

Sales of Large Remote Tracts in Alaska

Several notable transactions used in other appraisals of large tracts of remote Alaska acreage have been considered by the appraisers but disqualified as adequate data for the analysis of the subject. Due to the nature of the subject and the assignment, the inclusion of many of these transactions as "comparables" is likely to be expected. These transactions are summarized in the following table and the reasoning leading to their disqualification as adequate data are summarized in subsequent paragraphs.

Location	Date	Seller	Buyer	Area
Various	various	various Native Regional Corporations	various agencies of the U. S. Govt.	large tracts
<u>National Parks</u>				
Wrangell- St. Elias	9-85	M. Walker	USNPS	160
Gates of the Arctic	6-88	F. Gagnon		160
Denali	3-89	L. Cook		121
<u>Tok area</u>				
Tetlin	11-88	Tetlin Corp.	U. S. A. F.	2,901
Tanacross	11-88	Tanacross Inc.	U. S. A. F.	2,935
Gulkana	1-89	AHTNA	U. S. A. F.	5,409
Kachemak Bay	3-83	Seldovia Native Ass.	Alaska DNR	3,578
	4-85	Seldovia Native Ass.	Alaska DNR	960
Pribilof Islands	1-84	St. George & St. Paul Corps.	USFWS	8,224
Hydaburg, Goat Isl.	5-88	Haida Corp.	USA	4,749
Tazimina Lake	7-91	Kijik	USNPS	9,444
Trading Bay	12-90	KPB	Marathon Oil	320
<u>EVOS Trustee Council</u>				
Kachemak	8-93	Seldovia Native Ass.	Alaska DNR	23,802
Afognak	11-93	Seal Bay Timber	Alaska DNR	41,549
Kodiak	11-94	AKI, OHI, & Koniag	U. S. FWS	n/a
Kodiak Island	10-91	Leisnoi Native Corp.	Kodiak Isl. Borough	660
Kodiak National Wildlife Refuge	pending 8-94	various Native Alotees	USFWS	small parcels

Various Alaska Locations

Vast amounts of acreage in Alaska have been the subject of several proposed and completed exchanges that have occurred over the past several years. Most are characterized by a sorting-out process in which various agencies of the U. S. Government desired to reacquire tracts of land that were selected by native corporations under ANCSA. The exchanges do not represent adequate data (evidence of free open-market activity). There were no other prospective purchasers and the transactions reflect only project-related acquisitions by government agencies. In some cases, values were assigned without benefit of appraisals. In summary, the data and ultimately the "market" in which the transactions occurred, is not sufficiently adequate to derive meaningful value indicators that can be reliably correlated to the subject. While the exchanges have been considered, the data has not been used in our analysis.

Inholding Acquisitions in Various National Parks in Alaska

Three transactions represent acquisitions by the Park Service of inholdings within the boundaries of a national park (Wrangell-St. Elias, Denali, Gates of the Arctic). All are reported as arm's length transactions and as a sub-market, the market for inholdings appears to be minimally adequate. Numerous inholdings resulting from the creation of parks, wilderness, and wildlife refuges are scattered throughout Alaska. Inholdings can be strategic as commercial sites and/or desirable for private recreation. The presumption of suitable alternatives and numerous purchasers is not unreasonable.

If the properties were exposed to the market for a reasonable period, the purchase price eventually negotiated by a private sector purchaser could provide evidence of market value. However, where a negotiated sale does not follow a reasonable marketing period, the relevance of the data is suspect - particularly if the purchaser is a government agency under undue stimulus in the form of potential private development that would be incompatible. Project-related acquisitions are generally inadequate as evidence of market activity - at best reflecting only the price the seller was willing to accept, given knowledge of the purchasers motivations and a supposition of "deep pockets".

Pribilof Islands - Bering Sea, Alaska (1-84)

This parcel was acquired to preserve bird and seal sanctuaries in a coastal marine environment. The transaction is inadequate as evidence of meaningful "market" activity. First, the purchase was project-related. Assuming the tracts represent bonafide strategic or crucial habitat, there could not be numerous sellers offering suitable substitutes. Second, there were not numerous purchasers for these parcels. Subsequent to closing, the reasonable probability of recovering the investment is perceived to be little to none. The purchase price, approximately \$640 per acre, was reported to have been established by a 1984 Congressional Act (PL 96-487).

Subsequently, a U. S. Fish & Wildlife Service appraisal, based on the economic Highest and Best use, concluded a value of only approximately \$83 per acre.³¹ "The price authorized by Congress in that instance - eight times the market value - represented, not the workings of a market, but rather a political decision and a possible example of poor public policy judgment."³² Finally, the sale occurred prior to the general crash in Alaska "market" values.

Kachemak Bay, (Tutka Bay), Kenai Peninsula, Southcentral Alaska (3-83)

The transaction represents a project-related re-acquisition of lands by the State of Alaska. The parcel, situated within the boundaries of Kachemak Bay State Park, had been selected by the Seldovia Native Corporation pursuant to ANCSA. The transaction (an exchange) occurred prior to the crash in real estate values in the mid-80s. Furthermore, with the exception of waterfront acreage, there were not numerous prospective buyers for the property in bulk - much of which consists of steep backlands. Nor were there numerous sellers offering suitable alternatives. The tract was a key component of the project.

Given these circumstances, the transaction is not evidence of meaningful "market" activity and its use in an appraisal seeking market value is inappropriate.

³¹. Victoria Adams and Bill Mundy, MAI, "The Valuation of High-Amenity Natural Land", *The Appraisal Journal* (January 1991) 48-53.

³². Richard J. Roddewig, MAI and Gary R. Papke, "Market Value and Public Value: An Exploratory Essay", *The Appraisal Journal* (January 1993) 52-62.

Kachemak Bay, (near Halibut Cove), Kenai Peninsula, Alaska (4-85)

This transaction also represents a project-related re-acquisition by the State of Alaska in the same area. For the same reasons summarized in the previous paragraph, use of this transaction is inappropriate.

Goat Island - Hydaburg, Southeast Alaska (5-88)

This transaction was reported as a complex 3-part transaction resulting from the Haida Land Exchange Act of 1986. The legislation engineered a major acquisition by the U. S Forest Service that effectively rescued the owner, the Haida (Native) Corporation, from bankruptcy. The final values were arbitrarily assigned without the benefit of an appraisal. The transaction represents only the workings of political processes rather than evidence of free and open market activity.

Tok - Interior Alaska (11-88)

The U. S. Air Force acquired three large tracts in the interior of Alaska in late 1988/early 1989. Any perception that the number of transactions (3) represent an active marketplace is misinterpreted. All three are located in the same general area and represent project-related acquisitions by the same government agency for the "back-scatter" over-the-horizon radar system. For Air Force accounting purposes, they are identified as the Tok and Gulkana acquisitions. The two sites are differentiated by the nature of the property rights conveyed. Ahtna conveyed the Gulkana site in fee simple. Tanacross and Tetlin conveyed only a perpetual easement to the Tok site.

According to Moira Dennis, a real estate specialist with the U. S. Air Force at Elmendorf Air Force Base, the Corps of Engineers normally serves as an agent for such acquisitions. Per Ms. Dennis, Ahtna was not willing to accept the appraised values. Condemnation was considered. Attorneys for the land owner (Ahtna) went to Washington and negotiated the transaction at a higher level - with the Deputy Secretary of the Air Force. Likewise, the land owners of the Tok sites (Tanacross and Tetlin) were not willing to accept the appraised values and the negotiation proceedings went to a higher administrative level.

Consideration of these transactions as evidence of market activity is inappropriate. There were not numerous buyers driving values and the

properties had not been exposed to the market. Market prospects for the properties were slim to none. Such market conditions suggest that negotiations would heavily favor the buyer. Yet, the net result suggests gun-to-the-head negotiations in which the purchaser was at the wrong end. Given the project's criteria with regard to location, elevation, etc., and the extreme pressure to keep the project on a time-line - suitable alternatives, if any, were not practical. The parcels were appraised just prior to the acquisitions by an MAI appraiser. The appraiser concluded the Highest and Best Use was speculation and the per acre value conclusions ranged from \$200 to \$300 (fee simple). Administratively negotiated prices reflect per acre indicators from \$476 to \$511 per acre.

It should be noted that the U. S. Air Force acquired only perpetual easements on the Tok site(s). The agreement provided for a reversion back to the land owner in the event the Air Force abandoned the site. Abandonment, in terms of time, is defined as one year. Due to a cut in project funding, the site was never utilized. As of February 1994, an "Environmental Close-Out" was pending in Washington and the site is expected to revert back to the land owners (Tanacross and Tetlin). The Air Force is not entitled to any refunds, rebates, or prorations. In effect, the U. S. Air Force bought an option on a perpetual easement to 5,836 acres - at a price nearly double the appraised value of the fee simple interest. In summary, these transactions cannot be construed as evidence of open market activity. Their use in an appraisal seeking "market value" is wholly inappropriate.

Tazimina Lake - Lake Clark, Western Alaska (7-91)

This acreage, "selected" under ANCSA, lies within the boundaries of Lake Clark National Park and Reserve. A conservation easement purchased by the U. S. National Park Service effectively re-acquired the property for public use and assured compatibility with the management of the park/preserve. As a project-related acquisition, the transaction is not considered to provide a reliable indicator of "market" value. With the exception of a handful of waterfront parcels, market prospects for the property would have been poor and the only probable purchaser of this large block of acreage was the purchaser - a government agency under undue stimulus - the prevention of incompatible development. The objectives of the Park Service are not market driven and use of the data in the valuation of the subject is not appropriate.

Trading Bay - West Cook Inlet, Southcentral Alaska (12-90)

Marathon Oil Company acquired a 320 acre parcel (\$923/acre) on the west side of Cook Inlet for use as a drilling mud disposal site. The acreage is set-back from the water and is accessible to/from the limited infrastructure of the area by a gravel road. While the sale represents an arm's length transaction, it does not provide a reliable indicator of value.

First, the price is not supported by the sales and listings of similar tracts on the eastside of the Inlet - a submarket characterized by numerous sellers and buyers. Parcels (40 to 160 acres) with paved road access, available gas and electricity, are generally available for less than \$1,000 per acre. An 80 acre parcel with similar topography, located on the east side of the Inlet near the waterfront, roads, and commercial dock facilities was offered for sale during a six-month listing period in 1992 for approximately \$600 per acre. According to the listing agents, interest was minimal and the listing expired without an offer.

Second, in the sub-market in which the transaction occurred, there were not numerous sellers and the purchaser had few practical alternatives given the nature of the intended use. According to a representative of the Kenai Peninsula Borough (owner), the purchaser already had a suitable site on the east side of Cook Inlet. However, because of objections from nearby rural residents, Marathon elected to acquire a more remote site. The Kenai Peninsula Borough was the only source.

An extremely limited pool of prospective purchasers for properties on the west side of the Inlet is insufficient to drive values and the contention that the negotiated price was justified by a scarce supply of available land is not valid. In fact, in relation to true market demand, a dramatic oversupply of land is available. Although not marketed, the extensive holdings of the Kenai Peninsula Borough are generally available for purchase, lease, etc. In summary, the data is not considered to provide a reliable indicator of value and has not been included in our analysis.

Acquisitions by the Exxon Valdez Oil Spill Trustee Council

The settlements of civil and criminal suits stemming from the 1989 Exxon Valdez Oil Spill created super-funds of cash. The most notable is the \$900 million fund that is overseen by the Exxon Valdez Oil Spill Trustee Council. Approximately 19 parcels have been targeted for acquisition to preserve habitat. To date, acquisitions in Kachemak Bay on the Kenai Peninsula and on Afognak Island have been completed.

Understandably, acquisitions by the EVOS Trustee Council should not be considered evidence of free open-market activity. First, there are not numerous sellers. The Council is not free to shop throughout the state for alternatives for which there may be a greater urgency. Rather, the Council is directed to a limited number of specific properties that meet certain criteria - habitat for species affected by the oil spill.

Second, except for viable timberlands, there are not numerous buyers. The funds represent a one-time windfall, afterwhich, a reasonable probability of subsequent buyers for these large tracts is little to none. In otherwords, there is no sense of continuance. It would be difficult to support a contention that a transaction was representative of "market", if, immediately after closing the realistic prospects for reselling or otherwise recovering the investment in the foreseeable future were little to none.

Nevertheless, we have analyzed the transactions in order to identify meaningful indicators, if any.

Kachemak Bay

The re-acquisition of approximately 24,000 acres within the boundaries of Kachemak State Park had been pursued for approximately 15 years. For the past several years, the project had been a dead issue until recently resurrected as a result of the Exxon Valdez Oil Spill and subsequent settlements. Appraisers for both parties indicated an unusually wide range of value (excluding timber) from approximately \$12 million to \$23 million.

The upper-end indicator was based on a Highest and Best Use stated as "...natural land to be preserved and managed for its scenic, wildlife, and

recreational resources”³³. This conclusion was inappropriate and nearly all of the comparables used in the analysis would not meet the test of a market transaction. The appraisal was flawed.

The lower-end indicator was based on a Highest and Best Use stated as “...for recreational use and that the property be included in the Kachemak Bay State Park”³⁴. This conclusion was inappropriate but the appraisers employed a creative mathematical “attribute point system” that was not without merit.

An appraisal review panel consisting of three independent appraisers could not concur with either value estimate and concluded a value of approximately \$18 million including timber. It should be noted that the appraisers on the review panel did not independently appraise the property. The panel had only one week to complete an assignment that was extremely limited in scope. The panel relied largely on the data and Highest and Best Use conclusions of the two appraisals. Value estimates by the panel, assuming timber was cut on a portion of the land, ranged from \$11.62 million to \$15.49 million. Direct negotiations with the state legislature resulted in a value of \$20,000,000 (including timber) - representing the upper-end of the range assuming timber was cut (\$15.49 million) plus the estimated value of the timber (\$4.5 million). An unsupported \$2,000,000 was added to the purchase price to reflect a consideration for subsurface rights.

This transaction is clearly inappropriate as a “comparable”. First, the acquisition cannot be considered as a representation of the workings of a free and open market. Second, an inappropriate conclusion of Highest and Best Use (see Highest and Best Use Analysis) was a common thread throughout the valuation process.

Afognak Island (Seal Bay and Tonki Cape)

The acquisition of 41,549 acres on Afognak Island was completed after complex negotiations were forged into an agreement subject to appraisals. Appraisals indicated the negotiated purchase price was wholly supported by the 17,166 acres at Seal Bay. Yet, the owner/seller agreed to donate 24,384 additional acres (including timber rights) at Tonki Cape in order to facilitate the transaction.

³³. Seldovia Native Association appraisal, Mundy - Day- Bunn (9-89)

³⁴. Seldovia Native Association appraisal, Follett and Associates (12-89)

The nuts and bolts of the deal can be perceived according to two scenarios summarized in the following table. Scenario #1 most likely reflects the perception of the owner/seller - 17,166 acres at Seal Bay were sold for \$38,700,00 and the additional 24,384 acres at Tonki Cape were donated. The donation was likely to have favorable tax consequences for the grantor. Scenario #2 fairly reflects the perception of the purchaser - simply, 41,550 acres were purchased for \$38,700,00.

	Appraised Value Seal Bay	Appraised Value Tonki Cape	Appraised Values (aggregate)	<u>Scenario #1</u> Sale of Seal Bay Parcel (Tonki Cape donated)	<u>Scenario #2</u> Aggregate sale of both Seal Bay and Tonki Cape
Area	17,166 acres	24,384 acres	41,550 acres	17,166 acres	41,550 acres
Values/Price	\$41,000,000	\$11,000,000	\$52,000,000	\$38,700,000	\$38,700,000
Less: Appraised Timber Values	(\$36,500,000)	(\$3,700,000)	(\$40,200,000)	(\$36,500,000)	(\$40,200,000)
Ind. Residual Land Value	\$4,500,000	\$7,300,000	\$11,800,000	\$2,200,000	none
Ind. Per Acre Residual Value	\$262	\$299	\$284	\$128	none

If the entire purchase price was wholly supported by the 17,166 acres at Seal Bay, why would the owner/seller leave millions of dollars on the table? The motives of the owner/seller are unclear and the transaction invites conjecture. For example, it may not be unreasonable to theorize that the owner/seller was either subject to undue stimulus or was not knowledgeable and accepted a below-market price. On the other hand, it is entirely possible the owner/seller was more aware of true market prospects than the appraisers. The agreed upon purchase price, coupled with anticipated tax treatment of the donation, was probably recognized by the owner/seller as a preferable option to risky long term prospects dependent on a volatile timber industry. Sealaska Corporation reportedly "has enough timber for another decade of harvesting...". "Koncor Forest Products, a corporation formed by Native shareholders from Ouzinkie, Kodiak, Yakutat and Chenega...", "...has enough of its own stands of trees, primarily on Afognak and Montague Islands, to last through the next 25-30 years."³⁵

³⁵. "Timber markets are good, but supplies are short", *Alaska Journal of Commerce*, (5/30/94) 11

On the Kachemak lands, merchantable timber was identified only in pockets and the resource comprised a minority component of value. Based on the appraised values reported for the Seal Bay and Tonki Cape parcels, the timber resource represents the majority component of value. The transaction reflects arm's length negotiations. And, given that parcels were presumably suitable for an economic use (timber), it is not unreasonable to speculate that values would be driven by the supply and demand characteristics of the timber industry. Assuming other timberlands are available and more than one timber company competes in the industry - the value of viable timberlands should be optimized. However, without knowledge of the extent that favorable tax treatment on the donation might offset the \$13,300,000 left on the table (difference between the appraised values and the negotiated price), the willingness on the part of the owner/seller suggests that the appraised values are suspect.

Ultimately, the "donation" of the Tonki Bay tract dilutes the reliability of this transaction as evidence of free open-market activity. The trail of the negotiations suggests that the agreed-upon price of \$38,700,000 represents an approximation of a pre-determined objective of the owner/seller. If the owner/seller was not subject to duress or undue stimulus, the donation represents an acknowledgment on the part of the owner/seller of the real-world prospects for much of Alaska's remote acreage.

The transaction has some elements of a market transaction. And, it is important to recognize that the entire purchase price was supported by the economic value of the timber resource. The subjects have none. A property with a quantifiable timber resource cannot be considered "comparable" to one without simply because their "intended" uses are the same. If the transaction reflects any meaningful indicator - it is the indicated range of allocations for "cut-over" timber land - \$0 to \$128 per acre (see analyses in previous table). The allocations may fairly reflect an acknowledgment of the minimal per acre values that can be justified for large tracts of remote land for which long-term "speculation" is the Highest and Best Use.

Kodiak Island (Akiok-Kaguyak, Old Harbor, Koniag)

As of the date of valuation, negotiations are underway for the acquisition of tens of thousands of acres in the southwest region of Kodiak Island. Preliminary reports indicate negotiations are expected to finalize at 2 to 3 times the appraised market value estimates even though agency reviewers at the highest level in Washington concluded the methodology employed was reasonable and the individual value estimates were well-supported.

An investigation of the circumstances surrounding the acquisitions will indicate undue stimulus is a factor in the acquisition process. The prevention of development that might be incompatible with the goals and objectives of the Refuge, and the securing of habitat for the recovery of species supposedly affected by the spill, are atypical motivations based on subjective criteria. Also, there was pressure to complete negotiations prior to the November 3, 1994 elections as particular outcomes may not have been favorable for either the land owners or advocates for the acquisitions.

Summary of EVOS Acquisitions

Resemblance to arm's length negotiations for properties not under the threat of eminent domain is not sufficient to qualify a transaction. These acquisitions clearly do not meet the tests of a market transaction. Noticeably absent is the "principal of substitution" and market exposure - two significant considerations in the analysis of any transaction. Neither should the acquisitions be construed as indications of the premium public agencies must pay to acquire property for the public interest. It is important to recognize that the "sellers" in the acquisitions to date, are Native Corporations. As previously noted, undeveloped lands belonging to Native Corporations enjoy exemption from taxes, if any, and special protection from creditors. Furthermore, cultural resources (archaeological sites) have been documented on most of the EVOS parcels. Understandably, the Use and/or Investment Value to a Native Corporation may be higher than "market" value. It is not unreasonable to conclude that the price at which a Native Corporation would be willing to sell - would likely be higher than the price at which a typical owner would sell. Therefore, sales prices reflected by transactions in which undeveloped Native Corporation property was conveyed may reflect only indicators of "personal value" - as opposed to the economic concept of market value.

Salonie Creek - Kodiak, Alaska (10-91)

This is a large tract of land acquired by the Borough for public use. It had been utilized as a military firing range. The property had not been exposed to the market but the market for this property type could be described as sufficiently active that the parties would be knowledgeable. However, the sale has little relevance to the value of the subject because it is not remote. The parcel is located near the City of Kodiak, has road access and electricity is available. It is zoned Rural Residential and subdivision into homesites was a probable use of usable portions.

Pending Small Parcel Acquisitions in the Kodiak NWR

We are aware that the U. S. Fish and Wildlife Service is currently pursuing the acquisitions of several Native Allotments on Kodiak Island within the boundaries of the Kodiak National Wildlife Refuge. As of the date of this report, the transactions have not been consummated and details are not available. The Federal portion of the EVOS settlement is believed to be the source of funds for these acquisitions. Even if details were available, it is unlikely the transactions would qualify as adequate data for valuation purposes. They represent project-related acquisitions by a government agency subject to undue stimulus - the prevention of development incompatible with the goals and objectives of the Refuge. The transactions cannot be considered evidence of free and open market activity.

Conclusion

The transactions analyzed are not appropriate for use in an appraisal seeking "market" value. Acquisitions by public agencies and the EVOS Trustee Council discussed previously do not qualify as adequate evidence of free open-market activity. Liberal acceptance of their intended uses (preservation/conservation) as their Highest and Best Use, and considering them as "comparables" would result in subsequent flawed appraisals - economically unsupportable value estimates. In other words, one flawed appraisal, "supported" by the consummation of the deal, spawns another so that the appraisal process begins to establish, rather than measure, value.

COMPARABLE LAND SALE NO. 23

9615

9974

DATE OF SALE: 08-01-90 SIZE (ACRE): 2,220 PRICE/ACRE: \$203 RECORD NO.: 23

STATE: Alaska RECORDING DISTRICT: Homer

USGS QUAD MAP NO.: Seldovia D-5

REGION: Southcentral

SUB-REGION: Kenai Peninsula

COMMUNITY/NEIGHBORHOOD: Homer

LOCATION: Within 8 miles north, south and east of Anchor Point on the Kenai Peninsula, Alaska

LEGAL DESCRIPTION: Lengthy legal, see Property Description

RIGHTS CONVEYED: Fee simple - surface only.

GRANTOR: Security National Trust, Inc.

GRANTEE: Cloyd Moser and Chuck Homan

TAX ID: 159-290-01

INSTRUMENT: W D

BOOK/PAGE: 200/265

RECD'G DATE: 08-01-90

SALES PRICE: \$450,000

TERMS: \$50,000 down, \$400,000 deed of trust, 12% interest, 30 year amortization.

CEV/ADJ. PRICE: \$450,000

BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED Grantee
WITH: Cloyd and Erwin Moser
John McGrew, formerly of Grantor

BY/ S. McSwain
DATE: DLP/1-94
DLP/2-94

PRESENT USE: Paper platted recreation lots

INTENDED USE: Recreation subdivision

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation Subdivision

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies, wetlands/uplands

PHYSICAL ACCESS: None

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Fair, from extensive peat to good

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: Stream

VEGETATION: Sparse with some spruce

MARKET EXPOSURE: None, seller approached buyer.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: Buyer paid asking price.

BUYER/SELLER MOTIVATION: Seller was liquidating the parcel and turned a substantial profit in short time frame.

COMMENTS:

This property includes random tracts in six subdivisions that are subdivided into 222 paper platted ten acre tracts. These paper plat lots can be sold individually "as is" without physical access since they were platted prior to newer subdivision regulations. The tracts are typically located one-half to three miles from existing roads or the Sterling Highway, with section line easements for future road access. The Inlet View Tract (200 acres) has gravel road access east one mile from the highway (the grantees developed vehicular access to all but two subdivisions). This is a popular recreation area with good hunting in the fall and snow machining in the winter. Vegetation ranges from low bog plants in the wet peat areas (40%) to good gravel soils on the higher ground (60%) with spruce trees. This comparable sold for \$980,000 (plus \$50,000 in commissions) in December 1985. The grantees subsequently defaulted on the loan. It was then acquired by First National Bank of Anchorage, who purchased some of failed First Federal Bank's assets from FDIC. First National Bank of Anchorage then sold to Security National Trust for \$252,000 in March 1990. The grantees of the August 1990 sale did not have a cash equivalent estimate and would not have purchased it if it were a cash deal only. The parcel was never offered to the general public but was offered directly to the grantee. Mr. McGrew formerly of the grantor indicated that he thought the site would have sold for more, perhaps up to as much as \$250 per acre if it had been advertised. The grantees are selling the lots for up to \$15,000 each with zero down financing or a 50% discount for cash. Erwin Moser indicates that as of February 1994 approximately 100 of these lots have been sold. He indicated that the default rate is about 10%.

Legal Description

1) Tracts 1-46, Stariski Creek Acres #2 (460 Acres)
Sections 31 and 32, Township 3 South, Range 14 West, SM

2) Tracts 1-8 and 11-14, Chakok Acres (120 Acres)
Section 9, Township 4 South, Range 14 West, SM

3) Tracts 1-64, Terrace View (640 Acres)
Sections 12 and 13, Township 4 South, Range 14 West, BLM

4) Tracts 1-48, High Line Acres (480 Acres)
Section 22, Township 4 South, Range 14 West, SM

5) Tracts 1-20, Inlet View (200 Acres)
Sections 7 and 18, Township 5 South, Range 14 West, SM

6) Tracts 1-32, Salmon Heights (320 Acres)
Section 8, Township 5 South, Range 14 West, SM

COMPARABLE LAND SALE NO. 24

10220

DATE OF SALE: 12-91 SIZE (ACRE): 120 PRICE/ACRE: \$367 RECORD NO.: 24

STATE: Alaska RECORDING DISTRICT: Homer USGS QUAD MAP NO.: Seldovia C-5
REGION: Southcentral SUB-REGION: Kenai Peninsula

COMMUNITY/NEIGHBORHOOD: Anchor Point

LOCATION: Four miles SE of Anchor Point and 1 mile east of the Sterling Highway.

LEGAL DESCRIPTION: W1/2 NW1/4, NW1/4 SW1/4, Section 8, T5S, R14W, SM

RIGHTS CONVEYED: Fee simple, buyer thought all but oil & gas.

GRANTOR: Philip Maser, Jr.

GRANTEE: Leonard T. Schultz

FAX ID: 171-010-27 INSTRUMENT: WD BOOK/PAGE: 211/998 RECD'G DATE: 1-92

SALES PRICE: \$44,000 TERMS: \$10,000 down, 10% interest, 15 year term.

DEV/ADJ. PRICE: \$44,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED WITH: Cloyd Moser, Broker
Leonard T. Schultz, Grantee

BY/ DLP/1-94
DATE: DLP/1-94

PRESENT USE: Vacant INTENDED USE: Residential/Recreation

IMPROVEMENTS: None HIGHEST & BEST USE: Residential/Recreation

LEGAL ACCESS: Yes TOPOGRAPHY: Varies

PHYSICAL ACCESS: Undeveloped SITE SHAPE: Rectangular

ROAD IMPROVEMENTS: Unimproved SOILS: Poor to average

UTILITIES: None EASEMENTS: Normal

ZONING: Unzoned WATERFRONT: None

VEGETATION: Varies from swampy to heavy density spruce forest.

MARKET EXPOSURE: None, seller approached buyer.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: Negotiated.

BUYER/SELLER MOTIVATION: Broker indicated that he did not believe the seller was under duress. Seller unwilling to discuss sale. Buyer felt sales price represented fair market value.

COMMENTS:

Approximately 35% of this is wetlands unsuitable for development. Buyer subdivided the parcel into three lots and has since sold all three parcels. Access not develop to the site, however, the broker owned the adjacent site and is supposedly developing access to this parcel. Electricity and telephone is approximately one-half mile away.

COMPARABLE LAND SALE NO. 25

11231

DATE OF SALE: 2-92 **SIZE (ACRE):** 80 **PRICE/ACRE:** \$188 **RECORD NO.:** 25**STATE:** Alaska **RECORDING DISTRICT:** Homer**USGS QUAD MAP NO.:** Seldovia D-5**REGION:** Kenai Peninsula**SUB-REGION:** Homer**COMMUNITY/NEIGHBORHOOD:** Anchor Point**LOCATION:** Eleven miles NNE of Anchor Point and 1.3 mile east of the Sterling Highway, Anchor Point, Alaska**LEGAL DESCRIPTION:** W1/2 SW1/4 of Section 9, T3S, R14W, SM**RIGHTS CONVEYED:** Fee simple surface only.**GRANTOR:** John J. and Lucy McDonald**GRANTEE:** Arlo D. and Leslie A. Buchholz**TAX ID:** 159-112-10**INSTRUMENT:** WD**BOOK/PAGE:** 212/326**RECD'G DATE:** 2-92**SALES PRICE:** \$15,000**TERMS:** Cash**CEV/ADJ. PRICE:** \$15,000**BASIS FOR ADJUSTMENT:** None**CONFIRMED WITH:** Arlo Buchholz, Grantee 612-597-3650
Diane Martin, Selling Agent**BY/ DATE:** DLP/1-94
DLP/1-94**PRESENT USE:** Vacant**INTENDED USE:** Retirement homesite**IMPROVEMENTS:** None**HIGHEST & BEST USE:** Residential/Recreation**LEGAL ACCESS:** Yes**TOPOGRAPHY:** Varies**PHYSICAL ACCESS:** Undeveloped**SITE SHAPE:** Rectangular**ROAD IMPROVEMENTS:** Unimproved**SOILS:** Buyer unsure**UTILITIES:** None**EASEMENTS:** Normal**ZONING:** Unzoned**WATERFRONT:** None**VEGETATION:** Varies from muskeg areas to moderately dense spruce stands.**MARKET EXPOSURE:** Listed April 1991 for \$32,000 terms or \$22,000 cash.**SUPPLY & DEMAND CHARACTERISTICS:** Active market with numerous buyers and sellers.**BASIS FOR PURCHASE PRICE:** Negotiation.**BUYER/SELLER MOTIVATION:** Buyer acquired the site as a future retirement homesite. Seller motivation was unconfirmed.**COMMENTS:**

It is estimated that 25% of this site is wetlands area that is not suitable for development. Electricity is approximately one-half mile away. This is a popular recreation area with good hunting in the fall and snow machining in the winter. Vegetation ranges from low bog plants in the wet peat areas (25%) to good gravel soils on the higher ground (75%) with spruce trees. Buyer indicates he acquired this site as it seemed to have more uplands area than his other alternatives.

COMPARABLE LAND SALE NO. 26

10232

DATE OF SALE: 10-92 SIZE (ACRE): 480 PRICE/ACRE: \$219 RECORD NO.: 26

STATE: Alaska RECORDING DISTRICT: Homer USGS QUAD MAP NO.: Seldovia D-5
REGION: Kenai Peninsula SUB-REGION: Homer

COMMUNITY/NEIGHBORHOOD: Anchor Point

LOCATION: Eight miles NNE of Anchor Point and 1.7 miles east of the Sterling Highway

LEGAL DESCRIPTION: SE1/4 and SE1/4 SW1/4 of Section 29, NE1/4 NW1/4 and S1/2 NW1/4 of Section 32 T3S, R14W, SM

RIGHTS CONVEYED: Fee simple surface only.

GRANTOR: Astoria Investments

GRANTEE: Cloyd Moser/Quantum Health

TAX ID: 159-200-13 INSTRUMENT: W D BOOK/PAGE: 219/432 RECD'G DATE: 12/92

SALES PRICE: \$105,000 TERMS: \$72,000 down, buyer would not disclose term or interest rate, but indicated they were at market.

CEV/ADJ. PRICE: \$105,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED Cloyd Moser, Grantee 344-2008
WITH: Buzz Moore 235-2507

BY/ DLP/1-94
DATE:

PRESENT USE: Vacant

INTENDED USE: Residential/Recreation

IMPROVEMENTS: None

HIGHEST & BEST USE: Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies

PHYSICAL ACCESS: Undeveloped

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Good

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: None

VEGETATION: Swampy in the low land and spruce on the higher ground.

MARKET EXPOSURE: None, Buzz Moore brokered transaction in return for timber rights.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: Negotiated. Several offers and counter offers. Mr. Moore feels the price was fair market value.

BUYER/SELLER MOTIVATION: Grantee indicated that seller was not under undue pressure to sell the site.

COMMENTS:

This is the December 1992 sale and resale of 480 acres in Anchor Point. The first sale was when Buzz Moore negotiated the sale of site from Joseph Wayer to Security National, Inc. for \$72,000, cash, (\$150 per acre) with Mr. Moore getting to keep timber rights as his commission. Timber was taken off and sold as wood chips for pulp and export timber in Homer. Mr. Moore has finished logging the site taking just under 1,000,000 board feet of timber.

Security National then sold the site to Astoria Investments for an undisclosed amount of money. Astoria Investments immediately resold the site to Quantum Health for \$105,000 with \$72,000 down, and remainder at market terms. This most recent sale equals \$219 per acre.

Quantum Health subsequently subdivided into Eagle Estates and sold off all of the lots. Access was developed from an adjacent subdivision. It is estimated that 35% of the larger parcel site is wetlands area that is not suitable for development. Electricity and telephone is about 1.5 miles from this site.

COMPARABLE LAND SALE NO. 27

10232

DATE OF SALE: 04-93 **SIZE (ACRE):** 520 **PRICE/ACRE:** \$183 **RECORD NO.:** 27**STATE:** Alaska **RECORDING DISTRICT:** Homer **USGS QUAD MAP NO.:** Seldovia D-5**REGION:** Kenai Peninsula **SUB-REGION:** Homer**COMMUNITY/NEIGHBORHOOD:** Anchor Point**LOCATION:** Eight miles NE of Anchor Point, Alaska**LEGAL DESCRIPTION:** S1/2, S1/2 in Section 2, NE1/4 & E1/2 NW1/4 & NE1/4 SW1/4 & N1/2 SE1/4 NW1/4 in Section 11, T4S, R14W, SM**RIGHTS CONVEYED:** Fee simple including surface and subsurface.**GRANTOR:** Rita E. Silberman**GRANTEE:** Bill Germann, ROLCO**TAX ID:** 165-030-05 **INSTRUMENT:** WD **BOOK/PAGE:** 222/883 **RECD'G DATE:** 05-93**SALES PRICE:** \$95,000 **TERMS:** Cash**CEV/ADJ. PRICE:** \$95,000 **BASIS FOR ADJUSTMENT:** None**CONFIRMED WITH:** Bill Germann, ROLCO, Grantee 206 624-0623
Tim Tennis, Assessor
Buzz Moore**BY/ DATE:** DLP/2-94
DLP/2-94
DLP/2-94**PRESENT USE:** Vacant**INTENDED USE:** Speculative logging and subdivision**IMPROVEMENTS:** None**HIGHEST & BEST USE:** Residential/Recreation**LEGAL ACCESS:** Yes**TOPOGRAPHY:** Varies**PHYSICAL ACCESS:** Undeveloped**SITE SHAPE:** Flag**ROAD IMPROVEMENTS:** Unimproved**SOILS:** Average**UTILITIES:** None**EASEMENTS:** Normal**ZONING:** Unzoned**WATERFRONT:** Streams**VEGETATION:** Combination of low wet areas and hilly moderately dense spruce areas.**MARKET EXPOSURE:** Buzz Moore contacted seller who told him she had listed it with a broker out of Homer. Could not locate listing broker to see if advertised.**SUPPLY & DEMAND CHARACTERISTICS:** Active market with numerous buyers and sellers.**BASIS FOR PURCHASE PRICE:** Asking price, no negotiation. Mr. Moore indicated that he thought it was fair market value.**BUYER/SELLER MOTIVATION:** Buyer intends to selectively log the site. Development of access will stage for development.**COMMENTS:**

The buyer recently acquired this site and three others in order to selectively log the sites and develop access. Buyer intends to log off only those trees that have a 10+ inch diameter breast height. The logs will be marketed as both lumber and chips. He will only clear cut those areas absolutely required to develop access or for staging logging operations. He plans to reseed any areas that are clear cut with the exception of roadways. According to the buyer the trees on this site are between 100 and 150 years old.

Buyer believes that by selectively logging the site he will increase the residual value of the underlying parcel. Logging operations require the development of access and logging roads. The buyer believes that by effectively managing the logging operation the site will be enhanced as it will be more open and have developed access. Buyer indicated that spruce bark beetle infestation is in the immediate area and may soon spread to this site.

COMPARABLE LAND SALE NO. 28

10234

DATE OF SALE: 05-12-93 SIZE (ACRE): 360.91 PRICE/ACRE: \$194 RECORD NO.: 28

STATE: Alaska RECORDING DISTRICT: Homer USGS QUAD MAP NO.: Seldovia D-5

REGION: Kenai Peninsula SUB-REGION: Homer

COMMUNITY/NEIGHBORHOOD: Anchor Point

LOCATION: Eight miles NE of Anchor Point, Alaska

LEGAL DESCRIPTION: Government Lot 2, S1/2 NE1/4 SE1/4 in Section 3, N1/2 NE1/4 in Section 10, T4S, R14W, SM

RIGHTS CONVEYED: Fee simple including surface and subsurface.

GRANTOR: FDIC

GRANTEE: Bill Germann, ROLCO

TAX ID: 165-030-53 INSTRUMENT: QCD BOOK/PAGE: 224/729 RECD'G DATE: 07-93

SALES PRICE: \$70,000 TERMS: Cash

CEV/ADJ. PRICE: \$70,000 BASIS FOR ADJUSTMENT: None

CONFIRMED Bill Germann, ROLCO, Grantee 206 624-0623
WITH: Angie Newby, Listing Agent, Homer Realty 235-5294
Tim Tennis, Assessor

BY/ DLP/2-94
DATE: DLP/2-94
DLP/1-94

PRESENT USE: Vacant

INTENDED USE: Speculative logging and subdivision

IMPROVEMENTS: None

HIGHEST & BEST USE: Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies

PHYSICAL ACCESS: Undeveloped

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Average

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: None

VEGETATION: Combination of low wet areas (40%) and hilly moderately dense spruce areas.

MARKET EXPOSURE: Site listed with Homer Realty for about two months prior to earnest money agreement. Site was listed at \$72,000 during the entire listing period.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: FDIC could not confirm if purchase price was based on appraisal or negotiation. Broker indicated site was listed at \$72,000.

BUYER/SELLER MOTIVATION: FDIC wanted to liquidate its remaining assets. Buyer intends to selectively log the site and enhance value by developing access.

COMMENTS:

The seller was unable to locate this file to confirm details of the sale. The buyer recently acquired this site and three others in order to selectively log the sites and develop access. Buyer intends to selectively log only certain trees that will enhance the residual value of the remaining parcel. He will log off only those trees that have a 10+" diameter breast height. The logs will be marketed as both lumber and chips. He will only clear cut those areas absolutely required to develop access or for staging logging operations. He plans to reseed any areas that are clear cut with the exception of roadways. According to the buyer the trees on this site are between 100 and 150 years old.

Buyer believes that by selectively logging the site he will increase the residual value of the underlying parcel. Logging operations require the development of access and logging roads. The buyer believes that by effectively managing the logging operation the site will be enhanced as it will be more open and have developed access. Buyer indicated that spruce bark beetle infestation is in the immediate area and may soon spread to this site.

10235
COMPARABLE LAND SALE NO. 29

DATE OF SALE: 08-93 **SIZE (ACRE):** 560 **PRICE/ACRE:** \$250 **RECORD NO.:** 29

STATE: Alaska **RECORDING DISTRICT:** Homer **USGS QUAD MAP NO.:** Seldovia D-5

REGION: Kenai Peninsula **SUB-REGION:** Homer

COMMUNITY/NEIGHBORHOOD: Anchor Point

LOCATION: Eight miles NE of Anchor Point, Alaska

LEGAL DESCRIPTION: S1/2, N1/2 & NE1/4 SE1/4 & W1/2 SE1/4 & SW1/4 of Sec.14, & E1/2 NE1/4 & NE1/4 SE1/4 of Sec. 13, T4S, R14W, SM

RIGHTS CONVEYED: Fee simple surface estate.

GRANTOR: Elizabeth Dempsey

GRANTEE: Bill Germann, ROLCO

TAX ID: 165-111-44 **INSTRUMENT:** W D **BOOK/PAGE:** 226/338 **RECD'G DATE:** 09-93

SALES PRICE: \$140,000 **TERMS:** Cash

CEV/ADJ. PRICE: \$140,000 **BASIS FOR ADJUSTMENT:** None

CONFIRMED Bill Germann, ROLCO, Grantee 206 624-0623
WITH: Tim Tennis, Assessor
Buzz Moore 235-2507

BY/ DLP/2-94
DATE: DLP/2-94
DLP/2-94

PRESENT USE: Vacant

INTENDED USE: Speculative logging and subdivision

IMPROVEMENTS: None

HIGHEST & BEST USE: Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies

PHYSICAL ACCESS: Undeveloped

SITE SHAPE: Flag

ROAD IMPROVEMENTS: Unimproved

SOILS: Average

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: Creek

VEGETATION: Combination of low wet areas and hilly moderately dense spruce areas.

MARKET EXPOSURE: Buzz Moore approached seller directly on behalf of grantee. Never formally marketed.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: Negotiated through several offers and counter offers.

BUYER/SELLER MOTIVATION: Buyer intends to selectively log the site. Development of access will stage for development.

COMMENTS:

The buyer recently acquired this site and three others in order to selectively log the sites and develop access. Buyer intends to log off only those trees that have a 10+" diameter breast height. The logs will be marketed as both lumber and chips. As of February 1994 about 50% of this site has been logged. Only those areas absolutely required, in order to develop access or for staging logging operations will be clear cut. Any areas that are clear cut, with the exception of roadways will be reseeded. According to the buyer the trees on this site are between 100 and 150 years old.

Buyer believes that by selectively logging the site he will increase the residual value of the underlying parcel. Logging operations require the development of access and logging roads. The buyer believes that by effectively managing the logging operation the site will be enhanced as it will be more open and have developed access. Buyer indicated that spruce bark beetle infestation is in the immediate area and may soon spread to this site.

COMPARABLE LAND SALE NO. 30

10236

DATE OF SALE: 08-93 SIZE (ACRE): 600 PRICE/ACRE: \$392 RECORD NO.: 30

STATE: Alaska RECORDING DISTRICT: Homer USGS QUAD MAP NO.: Seldovia D-5

REGION: Kenai Peninsula SUB-REGION: Homer

COMMUNITY/NEIGHBORHOOD: Anchor Point

LOCATION: Seven miles southeast of Anchor Point, Alaska

LEGAL DESCRIPTION: NW1/4 and W1/2, NE1/4 and NE1/4, NE1/4 and S1/2, Section 9, T5S, R14W, S. M.

RIGHTS CONVEYED: Fee simple estate.

GRANTOR: Edmond J. McMahon 489-2265

GRANTEE: Brockwood Inc.

TAX ID: 171-010-08 INSTRUMENT: WD BOOK/PAGE: 224957 RECD'G DATE: 8-93

SALES PRICE: \$235,000 TERMS: \$50,000 down (22%), unable to confirm other financing details.

CEV/ADJ. PRICE: \$235,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED WITH: Tim Tennis, KPB Assessor

BY/ DATE: DLP/1-94

PRESENT USE: Vacant

INTENDED USE: Farm/Ranch

IMPROVEMENTS: None

HIGHEST & BEST USE: Residential/Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies from sloping to rolling

PHYSICAL ACCESS: Undeveloped

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Unimproved

SOILS: Typically poor to average in region

UTILITIES: None

EASEMENTS: Normal

ZONING: Unzoned

WATERFRONT: None

VEGETATION: Typical is grass and alders with spruce on higher areas.

MARKET EXPOSURE: Unable to confirm market exposure.

SUPPLY & DEMAND CHARACTERISTICS: Active market with numerous buyers and sellers.

BASIS FOR PURCHASE PRICE: Unknown

BUYER/SELLER MOTIVATION: Reportedly buyer intends to live on or near site and utilize the subject for ranching and farming etc.

COMMENTS:

Buyers did not wish to comment on this sale. Unable to contact seller. Information reported was data obtained from the Kenai Peninsula Borough tax assessor, assessing maps and topography maps.

8620

COMPARABLE LAND SALE NO. 31

DATE OF SALE: 1-89 **SIZE (ACRE):** 138.6 **PRICE/ACRE:** \$4,690 **RECORD NO.:** 31

STATE: Alaska **RECORDING DISTRICT:** Ketchikan

USGS QUAD MAP NO.: Ketchikan

REGION: Southeastern

SUB-REGION: Ketchikan

COMMUNITY/NEIGHBORHOOD: Revillagegado Island and Prince of Wales Island

LOCATION: Two parcels are located on Revillagegado Island, and two are at the north end of Prince of Wales Island, Alaska

LEGAL DESCRIPTION: USMS 1598, 423, 1040, 1042

RIGHTS CONVEYED: Fee simple surface and subsurface

GRANTOR: David and Kaye Syre

GRANTEE: Ketchikan Pulp Company

TAX ID:

INSTRUMENT: QCD

BOOK/PAGE: 163/213

RECD'G DATE: 1-89

SALES PRICE: \$650,000

TERMS: Cash

CEV/ADJ. PRICE: \$650,000

BASIS FOR ADJUSTMENT: None

CONFIRMED WITH: Ralph Lewis, Ketchikan Pulp, 225-2151

WITH: Ralph Lewis, Ketchikan Pulp

BY/ C. Horan/11-12-92

DATE: DLP/3-94

PRESENT USE: Vacant

INTENDED USE: Logging

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies from sloping to hilly

PHYSICAL ACCESS: Boat, Float Plane, Logging Roads

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Logging roads on adjacent sites

SOILS: Thin layer of overburden over marble bedrock.

UTILITIES: None

EASEMENTS: Typical

ZONING: None

WATERFRONT: 1,000 feet of ocean frontage

VEGETATION: Heavily forested with hemlock and spruce.

MARKET EXPOSURE: Seller approached buyer. Buyer indicates that seller was a land broker who made a living turning these types of properties. Unable to contact seller.

SUPPLY & DEMAND CHARACTERISTICS: There is a small but fairly active market for similar properties in this region.

BASIS FOR PURCHASE PRICE: Negotiated

BUYER/SELLER MOTIVATION: Buyer intended to log. Unable to confirm details of sale with the seller.

COMMENTS:

The following descriptive information was provided by Charles Horan, MAI and confirmed as accurate by Ralph Lewis, the buyers representative.

These four parcels contained a total of 138.6 acres. Parcel 1 has about 600 feet of frontage and contains about 40.7 acres. It is very close to parcel 2 which contains 20 acres and lies in a hillside creek drainage. These sites are located in the Misty Fjords National Monument and are timbered. Parcel 3 consists of two adjacent mining claims containing a total of 40 acres. It is on a knoll above Red Bay and sloping downward to within 1,200 feet of the bay. They are heavily forested with hemlock and spruce. The site is well drained and has a thin layer of overburden on marble bedrock. The immediate adjacent lands are USFS owned and have been clear cut. There is a logging road which ends near the subject. Parcel 4 contains 37.9 acres and is located 13 miles east of Point Baker. The parcel has about 400 feet of frontage on Sumner Straight, is heavily forested, gentle sloping and well drained. The beach may be exposed to strong easterly winds during the winter months. Logging roads are in the area but are not extended to the site.

The site was purchased based on the value of the timber. No residual value was given to the cut over land or for mineral potential. The price paid was for timber only, there was no allocation to mineral value.

COMPARABLE LAND SALE NO. 32

DATE OF SALE: 7-18-89 SIZE (ACRE): 623.427 PRICE/ACRE: \$1,604 RECORD NO.: 32

STATE: Alaska RECORDING DISTRICT: Ketchikan USGS QUAD MAP NO.: Craig B-4

REGION: Southeastern SUB-REGION: Klawock

COMMUNITY/NEIGHBORHOOD: Wadleigh Island

LOCATION: Wadleigh Island, approximately 1.5 miles west of Klawock, Alaska

LEGAL DESCRIPTION: Assemblage of 33 patented mining claims within T27S R80E, CRM, Sections 33 and 34, and T73S, R80E

RIGHTS CONVEYED: Fee simple surface and subsurface

GRANTOR: USX Corporation of Delaware

GRANTEE: Robert Reed and Mike Blair dba B&M Logging of Estacada, Oregon

TAX ID: INSTRUMENT: Mining Deed BOOK/PAGE: 171/257-262 RECD'G DATE: 7-89

SALES PRICE: \$1,000,000 TERMS: Unspecified down payment, a minimum \$50,000 deposit was paid. Balance was paid out of logging royalty in 2.3 years. C. Horan thought terms represented a cash transaction.

CEV/ADJ. PRICE: \$1,000,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED WITH: Michael Blair
Robert Reed, Jr.

BY/ C. Horan/11-13-92
DATE: DLP/3-94

PRESENT USE: Vacant

INTENDED USE: Logging

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging/Mineral

LEGAL ACCESS: Yes

TOPOGRAPHY: Moderate to undulating

PHYSICAL ACCESS: Boat, Plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Good with thin organic layer that supports heavy timber.

UTILITIES: None

EASEMENTS: Typical

ZONING: None

WATERFRONT: 7,000 feet ocean

VEGETATION: Heavily forested with hemlock, spruce and cedar.

MARKET EXPOSURE: Site was marketed but unable to confirm marketing time.

SUPPLY & DEMAND CHARACTERISTICS: Very small market for large acre parcels in this area.

BASIS FOR PURCHASE PRICE: Land was acquired in a bid. Buyer added a 2% limestone royalty as the buyers felt the sellers had a high regard for the mining claims.

BUYER/SELLER MOTIVATION: Site was excess to sellers needs. Buyers desired to log the site.

COMMENTS:

The following information was provided by C. Horan, MAI who had interviewed the buyer. Robert Reed, Jr. confirmed that that Mr. Horan's analysis was representative of the transaction.

The site consists of contiguous mining claims which comprise a large portion of Wadleigh Island and total 623.4 acres. There is an estimated 7,000' of water frontage. The topography is moderate to undulating with elevations generally below 500' down to water level. There are several drainages and draws on the site. The site is remote and has no utilities. It is not within a municipal boundary and is not subject to zoning restrictions or tax assessments. Merchantable timber quantity estimates ranged from 10.7 MMBF to 22MMBF. It was estimated to be 75% hemlock, 24% spruce and 1% cedar. The sale held out 2% of gross revenue FOB site from limestone quarry.

Buyers were motivated by its timber potential and had at least two offers to sell stumpage when the sale took place. The stumpage sold for \$1,000,000 to Murphy Timber on September 29, 1989, Book 171, Page 266. Murphy Timber felt there was 12 to 15 MMBF of exportable timber on site at the time of sale. The buyers had been negotiating with an option holder for a price of about \$800,000. The option holder lost his position and the land went to bid where the buyer acquired the site for \$1,000,000 and a 2% limestone royalty was reserved for the seller. The buyers felt the value of merchantable timber supported 100% of the purchase price. No portion of the value was allocated to the subsurface estate (minerals) or cutover land.

COMPARABLE LAND SALE NO. 33

1251

DATE OF SALE: 7-21-89 SIZE (ACRE): 512 PRICE/ACRE: \$781 RECORD NO.: 33

STATE: Alaska RECORDING DISTRICT: Ketchikan

USGS QUAD MAP NO.: Craig D-5

REGION: Southeastern

SUB-REGION: Near Prince of Wales Island

COMMUNITY/NEIGHBORHOOD: Edna Bay on Kosciuko Island

LOCATION: Edna Bay on Kosciuko Island, west of Prince of Wales Island, 60 miles west of Wrangell, Alaska

LEGAL DESCRIPTION: Within section 28, 29, and 33, T68S, R76E, Copper River Meridian

RIGHTS CONVEYED: Fee simple surface and subsurface.

GRANTOR: Alcoa Aluminum

GRANTEE: William (Skip) Ritcher, WAP 7917, Flying Tiger

TAX ID:

INSTRUMENT: WD

BOOK/PAGE: 169/650

RECD'G DATE: 7-89

SALES PRICE: \$400,000

TERMS: Cash

CEV/ADJ. PRICE: \$400,000

BASIS FOR ADJUSTMENT: None

CONFIRMED WITH: Bev Davis, Selling Agent, Capital Realty
Skip Ritcher
Marty McDowell, DOT
Bev Davis, Capital Realty

BY/ C. Horan/9-5-91
DATE: C. Horan/9-5-91
C. Horan/9-5-91
DLP/3-94

PRESENT USE: Abandoned limestone quarry

INTENDED USE: Buyer intended to log the site, and had unspecified future development plans.

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging

LEGAL ACCESS: Yes

TOPOGRAPHY: Varied from level to sloping

PHYSICAL ACCESS: Boat, Plane, Logging road

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Logging roads onsite

SOILS: Good

UTILITIES: None

EASEMENTS: Typical

ZONING: None

WATERFRONT: 3,520 feet Edna Bay

VEGETATION: Hemlock, spruce and cedar.

MARKET EXPOSURE: Listed for sale in excess of two years. Advertised in the Wall Street Journal and locally.

SUPPLY & DEMAND CHARACTERISTICS: Selling agent indicates that market for large acre sites similar to this comparable is very small.

BASIS FOR PURCHASE PRICE: Negotiated, not based on appraisal or timber cruise.

BUYER/SELLER MOTIVATION: Seller divested site as mineral deposits were not as valuable as desired. Buyer motivation undisclosed.

COMMENTS:

We were unable to contact either the buyer or seller to confirm the actual price paid or buyers motivation. We have relied on information supplied to us by Charles Horan, MAI who has interviewed the buyer. The following information was provided by Charles Horan, MAI.

The buyer originally thought that the site contained about 2 MMBF of merchantable timber. After logging about 800 MBF he felt there was about 200 MBF left to log. The project ran into cost overruns and the expectation of return on logging was not achieved. Originally, he had estimated that the logging should have netted the value of the land with no increment to value of cut over land, subsurface or mineral value.

The purchaser intended to log the timber lands and had an unspecified future development plans for the remainder. He supposed that it could be used for homesites. It was important to the buyer that there was deep water access with possible shipping potential. The site was also important because it represented a large contiguous ownership in an area where large pieces are extremely rare.

COMPARABLE LAND SALE NO. 34

10050

DATE OF SALE: 5-22-91 SIZE (ACRE): 229.1 PRICE/ACRE: \$546 RECORD NO.: 34

STATE: Alaska RECORDING DISTRICT: Juneau USGS QUAD MAP NO.: Juneau D-4

REGION: Southeastern SUB-REGION: Juneau

COMMUNITY/NEIGHBORHOOD: Johnson Creek above Berners Bay

LOCATION: Johnson Creek above Berners Bay, 60± north of downtown Juneau, Alaska

LEGAL DESCRIPTION: USMS 261, 264, 265, 266, and 678 within Sections 10, 11, 14 and 15, T35S, R62E, CRM

RIGHTS CONVEYED: Fee simple surface only.

GRANTOR: University of Alaska

GRANTEE: Hyak Mining Company

TAX ID: 3N000EB0110/20 INSTRUMENT: QCD BOOK/PAGE: 345/250 RECD'G DATE: 5-22-91

SALES PRICE: \$125,000 TERMS: 10% down, 10% interest, with quarterly payments of \$112,500 for 15 years.

CEV/ADJ. PRICE: \$125,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED WITH: U of A Representative Marty Epstein
U of A Representative Mary Montgomery
Neil McKinnon, Hyak Mining Co.

BY/ DLP/1-94
DATE: DLP/1-94
DLP/1-94

PRESENT USE: Old mill site

INTENDED USE: Surface support site for subsurface mining activity

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging/Mineral

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies from level to hilly

PHYSICAL ACCESS: Walk in

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Varies from poor to good

UTILITIES: None

EASEMENTS: Normal

ZONING: None

WATERFRONT: Ocean

VEGETATION: Some rocky hillsides, timber and creek bottom land, sparsely forested

MARKET EXPOSURE: Not advertised. Grantee owned subsurface estate, and had surface rights to support ongoing mining operations. Site of little value to others.

SUPPLY & DEMAND CHARACTERISTICS: This market has a limited number of buyers and sellers. This site is unique as grantee was mining subsurface.

BASIS FOR PURCHASE PRICE: Negotiated. Seller felt the sales price represented market value. Buyer felt price was high at time but in retrospect thinks it was market.

BUYER/SELLER MOTIVATION: Seller (UAA) has 210,000 total acres of land for sale or lease. Buyer desired site to resolve access and permit concerns.

COMMENTS:

This is the sale of an old mill site that was part of a larger mining operation. The buyer is a mining company that owned the subsurface and wanted to explore this site, but needed the surface estate to resolve access and permitting concerns. There are no utilities available. The site was thought to be covered with mostly unmerchantable spruce and hemlock. There is some second growth and substantial clearings with brush and other modest vegetation claiming the mining areas. Apparently the buyer and seller had negotiated the sales price over along period of time and both felt it was an arms length transaction. The seller had no other immediate buyer prospects and wanted to limit the liability. Both parties felt it was a clearing up of a nuisance. The buyer ended up selling the timber at a price that paid for the site. Buyer feels that there is very little remaining value to the surface site after it has been logged.

COMPARABLE LAND SALE NO. 35

9896

DATE OF SALE: 12-91 SIZE (ACRE): 340.7 PRICE/ACRE: \$2,348 RECORD NO.: 35

STATE: Alaska RECORDING DISTRICT: Ketchikan USGS QUAD MAP NO.: Craig A-2

REGION: Southeastern SUB-REGION: Hetta Inlet

COMMUNITY/NEIGHBORHOOD: Copper Harbor

LOCATION: Copper Harbor off of Hetta Inlet, Prince of Wales Island, Alaska

LEGAL DESCRIPTION: USMS 419A, and portions of USMS 419B, USMS 1023, within Sections 3, 4, 5, 8 and 9, T77S, R58E, CRM

RIGHTS CONVEYED: Fee simple surface and subsurface.

GRANTOR: Key Bank of Alaska

GRANTEE: Joe Henry, Southcentral Timber Development, Inc.

TAX ID: INSTRUMENT: QCD BOOK/PAGE: 197/659 RECD'G DATE: 12-91

SALES PRICE: \$300,000 TERMS: Mostly financed with extra collateral. Note to be paid out of logging operations within one year.

CEV/ADJ. PRICE: \$800,000 BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED WITH: Joe Henry
Dan Mock, Key Bank of Alaska 564-0446
Joe Henry

BY/ C. Horan/11-12-92
DATE: C. Horan/11-17-92
DLP/3-94

PRESENT USE: Vacant

INTENDED USE: Logging

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging

LEGAL ACCESS: Yes

TOPOGRAPHY: Moderate to undulating

PHYSICAL ACCESS: Boat, Plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Good with thin organic layer that supports heavy timber.

UTILITIES: None

EASEMENTS: Typical

ZONING: None

WATERFRONT: 1,410 feet ocean

VEGETATION: Heavily forested with hemlock, spruce and cedar.

MARKET EXPOSURE: Site was reportedly listed at \$1,500,000 for over a year prior to foreclosure. Several offers between \$1.0 million and \$1.2 million, but site foreclosed before execution of these offers. Key Bank marketed at \$1.2 million before this offer.

SUPPLY & DEMAND CHARACTERISTICS: Limited market for large acre parcels in this area.

BASIS FOR PURCHASE PRICE: Negotiated.

BUYER/SELLER MOTIVATION: Seller had foreclosed on previous owner and desired to minimize its losses. Buyer intended to log the site in order to pay off the note and was unsure of what he would do with the remainder.

COMMENTS:

The following information was provided by C. Horan, MAI who had interviewed the buyer. The buyer confirmed that that Mr. Horan's analysis was representative of the transaction although he would not reconfirm the sales price. Unable to contact seller's representative to confirm detail.

The site consists of 23 mining claims that encompass steep mountainous slopes up to 3,500 feet above sea level. It contains nearly 340.7 acres, with an estimated 1,410' of water frontage. Two creeks run through the site. The topography is moderate to undulating with about 15 acres of level cleared area near the beach. There is a relatively well protected anchorage in Copper Harbor. The site is remote and has no utilities. It is not within a municipal boundary and is not subject to zoning restrictions or tax assessments. Merchantable timber quantity estimates ranged from 5 MMBF to 8 MMBF. Seller estimated it was between 5 and 7 million board feet. Buyer subsequently indicated that it was less than the sellers estimate.

Buyer was motivated by its timber potential. There was no formal stumpage value estimate or detailed logging program developed at the time of purchase. The purchasers retained Sullivan Logging Company to log the site with Charlie Nash as the onsite consultant. Buyer tried to sell stumpage but was unable to locate a buyer, perhaps due to the high asking price. The buyer had five or six different ideas of what type of development could occur on the site. He felt at the time of purchase that the timber had to pay the entire price with no particular residual to the cutover land or subsurface mineral estate. Buyer was vague on timber values and stumpage estimates.

COMPARABLE LAND SALE NO. 36

10237

DATE OF SALE: 4-92 **SIZE (ACRE):** 264.18 **PRICE/ACRE:** \$348 **RECORD NO.:** 36

STATE: Alaska **RECORDING DISTRICT:** Valdez

USGS QUAD MAP NO.: Cordova D-7

REGION: Southcentral

SUB-REGION: Prince William Sound

COMMUNITY/NEIGHBORHOOD: Fidalgo Bay

LOCATION: South shoreline of Fidalgo Bay, East of Irish Cove, Prince William Sound, Alaska

LEGAL DESCRIPTION: USMS 1584, Patent No. 1072905, Section 35, T12S, R7W, and Sections 2 and 3, T13S, R7W, Copper River Meridian

RIGHTS CONVEYED: Fee simple surface and subsurface estate.

GRANTOR: Charles Herbert

GRANTEE: Citigreen, Inc.

TAX ID:

INSTRUMENT: SWD

BOOK/PAGE: 116/454

RECD'G DATE: 04-92

SALES PRICE: \$92,000

TERMS: Cash

CEV/ADJ. PRICE: \$92,000

BASIS FOR ADJUSTMENT: None

CONFIRMED Chuck Herbert, Grantor, 248-9140

WITH: Bob Rice, Grantee

Claire Doig, Forest and Land Management (206) 866-8045

BY/ DLP/3-94

DATE: DLP/3-94

SEC/3-94

PRESENT USE: Defunct Copper Mine

INTENDED USE: Logging

IMPROVEMENTS: Vacant

HIGHEST & BEST USE: Logging

LEGAL ACCESS: Yes

TOPOGRAPHY: Undulating to very steep

PHYSICAL ACCESS: Boat, Float Plane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: None

SOILS: Good

UTILITIES: None

EASEMENTS: None

ZONING: None

WATERFRONT: 1,200' ocean frontage

VEGETATION: Hemlock mixed with spruce.

MARKET EXPOSURE: The subject was on and off the market for over ten years.

SUPPLY & DEMAND CHARACTERISTICS: Limited demand for large acreage parcels in this region.

BASIS FOR PURCHASE PRICE: Negotiated. Price was gradually lowered over a 10 year period from \$400,000 to \$250,000, the listing price at date of sale.

BUYER/SELLER MOTIVATION: Buyer desired site for its timber. Sellers were becoming elderly and land was surplus to their current needs.

COMMENTS:

This parcel consists of 15 patented claims formerly mined for copper. The seller indicates there is over 5,200 feet of mining tunnels on the site. A large portion is very steep upland with marginal shoreline influence. Nearby Irish Cove offers protected waters. The predominate shoreline profile is low to medium bank. Upland terrain ascends steeply from the shoreline and then changes to an undulating plateau of approximately 50 acres. Some logging on a small portion of the upland occurred in the early 1980's. Buyer has established a logging operation adjacent to this site. Seller granted the buyer permission to conduct a timber cruise which indicated between 90 and 100 acres had merchantable timber. Based on this information the buyer offered to buy the timber rights for \$48,000. The seller refused because he wanted to divest himself of the entire parcel. The final sales price of \$92,000 was negotiated. Seller indicated that the \$92,000 sales price represented the fair market value of the site. Seller does not believe that the Exxon oil spill impacted the value of his site. There is no evidence of undue stimulus or duress affecting the sales price of this property. The buyers completed the purchase after having discussed a sale of the cutover land with Tatitlik Corporation - the owner of surrounding lands. According to Mr. Claire Doig, an independent forester and land manager representing Tatitlik, \$35,000 (\$132/acre) was the tentative figure for the cut-over land. Mr. Doig reported that the market prospects for the cut-over land were nil but the acquisition would have eliminated a potential nuisance and minimized a perceived liability (abandoned mine shafts). Per Mr. Doig, the subsequent sale of the cutover land was never completed and the \$132/acre indicator was not supportable in the marketplace. If the transaction had been consummated, the transaction would have reflected the influence of undue stimulus and a nuisance value at best. Mr. Doig is confident that the buyers recovered all of their investment from the timber and suggested that \$100 per acre was the upper-end of allocations that can be justified for cut-over land in Alaska. Mr. Rice reported that his company usually assumes a residual value of between \$50 and \$100 per acre for cut over land. He indicated this may be low in comparison to the residuals allocated in other parts of the country but cited the lack of a market and a relatively long regeneration time for the resource.

COMPARABLE LAND SALE NO. 37

10238

DATE OF SALE: 2-93 SIZE (ACRE): 190.4 PRICE/ACRE: \$1,822 RECORD NO.: 37

STATE: Alaska RECORDING DISTRICT: Ketchikan

USGS QUAD MAP NO.: Ketchikan A-6, B-6

REGION: Southeastern

SUB-REGION: Ketchikan

COMMUNITY/NEIGHBORHOOD: Gravina Island

LOCATION: Gravina Island

LEGAL DESCRIPTION: USMS 725

RIGHTS CONVEYED: Fee simple except for oil and gas.

GRANTOR: Gravina Island Associates

GRANTEE: MRGC Timberland Ltd. Partnership

TAX ID: 3050001082000

INSTRUMENT: SWD

BOOK/PAGE: 212/127

RECD'G DATE: 8-5-93

SALES PRICE: \$347,000

TERMS: Would not disclose. As site was purchased for logging, terms are assumed to be cash or its equivalent.

CEV/ADJ. PRICE: \$347,000

BASIS FOR ADJUSTMENT: None - terms are considered to be cash equivalent.

CONFIRMED Connie, Haines Assessing office

BY/ DLP/01-94

WITH: Larry Blydenstein, MRGC Timberland (206) 452-4933

DATE:

PRESENT USE: Vacant

INTENDED USE: Logging

IMPROVEMENTS: None

HIGHEST & BEST USE: Logging

LEGAL ACCESS: Yes

TOPOGRAPHY: Varies from level to hilly

PHYSICAL ACCESS: Boat, airplane

SITE SHAPE: Varies

ROAD IMPROVEMENTS: None

SOILS: Good

UTILITIES: None

EASEMENTS: Normal

ZONING: General

WATERFRONT: Ocean

VEGETATION: Forested - Moderately Dense

MARKET EXPOSURE: Buyer approached seller. Seller would not comment on market exposure.

SUPPLY & DEMAND CHARACTERISTICS: Buyer indicates that there is a shortage of timber land in southeastern Alaska and the western United States.

BASIS FOR PURCHASE PRICE: Timber cruise and subsequent negotiation.

BUYER/SELLER MOTIVATION: Seller motives unknown. Buyer motives are profit driven.

COMMENTS:

Seller would not disclose terms of the sale. Buyer would confirm everything except price. Buyer did say that the price was not very much above the reported \$347,000, that the seller had paid for the site in February 1993. Seller had acquired the site in a non-arms length transaction. Buyer indicates that no value was allocated to the cut-over site. They would not have acquired the site if the value of the timber alone had not yielded a satisfactory return. Mr. Blydenstein indicated that he is unaware of any market for cut-over timberland in Alaska because of the extensive amount of time for regrowth to occur. It is his opinion that \$100 per acre may be a little high as a value for cut over land considering that there is no known market for cut-over timber land. However he felt that maybe it represented a fair speculation considering that taxing authorities generally assess cut over timber land at very low values so that the holding costs are almost minimal.

COMPARABLE LAND SALE NO. 38

11239

DATE OF SALE: Fall 1993 **SIZE (ACRE):** 10,634.43 **PRICE/ACRE:** \$125 **RECORD NO.:** 38

STATE: Alaska **RECORDING DISTRICT:** Palmer

USGS QUAD MAP NO.: Anchorage C-7

REGION: Southcentral

SUB-REGION: Talkeetnas

COMMUNITY/NEIGHBORHOOD: Hatcher Pass

LOCATION: South of the Independence Mine State Park approx. 60 road miles north of Anchorage and 20 road miles north of Palmer, Alaska

LEGAL DESCRIPTION: Length aliquot parts description located in T19N, R1E, Seward Meridian

RIGHTS CONVEYED: Leasehold Surface Estate

GRANTOR: Lessor- State of Alaska

GRANTEE: Lessee- Hatcher Pass Development Co. owned by Fred Rogers of Ketchum, Idaho

TAX ID: N/A

INSTRUMENT: Lease Agreement **BOOK/PAGE:** 734/350

RECD'G DATE: 09-27-93

SALES PRICE: \$13,300,000 **TERMS:** Base land lease is \$93,000 per annum plus sliding percentage of gross revenue.

CEV/ADJ. PRICE: \$1,330,000 **BASIS FOR ADJUSTMENT:** Calculated by capitalizing base lease of \$93,000 by 7%.

CONFIRMED WITH: Mike Sullivan, DNR, State of Alaska
Greek Taylor, DNR, State of Alaska

BY/ DATE: DLP/1-94
DLP/1-94

PRESENT USE: Recreational

INTENDED USE: Commercial - Ski resort

IMPROVEMENTS: None

HIGHEST & BEST USE: Recreation

LEGAL ACCESS: Yes

TOPOGRAPHY: Sloping to steep

PHYSICAL ACCESS: Automobile, airplane

SITE SHAPE: Irregular

ROAD IMPROVEMENTS: Gravel

SOILS: Glacial till, alpine tundra and talus

UTILITIES: None

EASEMENTS: Normal

ZONING: Talkeetna Mtns. Special Use Dist.

WATERFRONT: None

VEGETATION: Dense alders, weathered bedrock with alpine tundra and exposed talus.

MARKET EXPOSURE: This site has been available for lease for many years. At least one other time the site was negotiated for a potential lease.

SUPPLY & DEMAND CHARACTERISTICS: There are other alternative sites available. Several entities have considered similar projects in this region.

BASIS FOR PURCHASE PRICE: Negotiation.

BUYER/SELLER MOTIVATION: Lessor was willing to accept lower base lease value in return for performance bonds and larger percentage of future gross revenue.

COMMENTS:

This is the 55 year lease of a large site in the northern portion of southcentral Alaska. The lease expires at midnight on September 15, 2048. The site consists mostly of steep mountainous terrains that will be developed with a ski resort. The lessee anticipates completing the first of three phases, which includes opening the ski slopes, by the fall of 1995. There is no water frontage, but there is expansive views of the Matanuska Valley and the Talkeetna Mountains.

Ground rents consist of two components, a base rent of \$93,000 per year and a sliding percentage of gross revenues. According to Greek Taylor of the State of Alaska Department of Natural Resources, the State was willing to accept a low base ground rent in order to get the project off of the ground. In return for a lower base rate they negotiated a higher percentage of the future gross revenues, and they required the lessee to post development bonds to protect them if the lessee failed to develop the site. The base ground rents are considered to be less risky than percentages of speculative revenues. A capitalization rate of 6% to 8% is considered to fairly reflect a "safe" rate. To derive a per acre indicator, we have capitalized the base annual ground rents of \$93,000 @ 7%.

$$\$93,000 \div .07 = \$1,330,000, \text{ rounded.}$$

$$\$1,330,000 \div 10,634.43 = \$125 \text{ per acre}$$

MINERAL POTENTIAL REPORT

KODIAK ISLAND BOROUGH LANDS

SHUYAK ISLAND, ALASKA

by
Donald L. Stevens, Ph. D.
Stevens Exploration Management Corp.
1048 West International Airport Road, Suite 103
Anchorage, Alaska 99518-1005
(907) 561-1991
July 25, 1994

Prepared under a subcontract to:
Black-Smith and Richards, Inc.
2602 Fairbanks Street
Anchorage, Alaska 99503
(907) 274-4654

for
Contract No.: 53-019-3-00377
Task Order No.: 377-03-A

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A search of the available published geologic data on the mineral resources of the Kodiak Islands did not find any references to any mineral occurrences on Shuyak Island. A computer search of the Bureau of Land Management Alaska records located no active claims and one placer claim on Shuyak Island which has been abandoned. A computer search of the State of Alaska Land Information System located one claim in which the case status was closed and one claim that was still active. However, the active claim was not on the land owned by the Kodiak Islands Borough and therefore was not to be considered in this report. Although there are apparently several minor mineral occurrences, there is a very low potential for the discovery of significant new mineralization.

The geology of Shuyak Islands is not conducive to the formation of significant mineral deposits by any modern ore deposit theory or model and the modern minerals exploration professional is not likely to find the area even marginally attractive for exploration. The probability of discovery of any significant mineral occurrence is so low that there is no negative impact on the value of the surface estate. There is no market value for any undiscovered mineral resource.

The mineral potential and previously claimed mineral occurrences do not appear to have any significant market value.

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: KIB01	PARCEL NAME: Shuyak Island	SCORE: 63.0
LANDOWNER: Kodiak Borough		PARCEL ACREAGE: 27,900

INJURED RESOURCE / SERVICE	POTENTIAL FOR BENEFIT	COMMENT
PINK SALMON	Moderate	Six documented spawning streams; average production.
SOCKEYE SALMON	Low	
CUTTHROAT TROUT	None	
DOLLY VARDEN	High	Eight documented streams.
PACIFIC HERRING	Moderate	Documented occasional spawning along parcel shoreline.
BALD EAGLE	Low	
BLACK OYSTERCATCHER	Moderate	Feeding along shoreline; known nesting.
COMMON MURRE	Low	
HARBOR SEAL	Moderate	Nearshore feeding; haulouts.
HARLEQUIN DUCK	Moderate	Documented feeding; molting on nearshore rocks and islets; possible breeding.
INTERTIDAL/SUBTIDAL BIOTA	High	Rocky shoreline with heavy kelp beds and pockets of eelgrass; mussels; rich in invertebrates; adjacent Shuyak Strait highly productive.
MARBLED MURRELET	Moderate	Feeding; probable nesting.
PIGEON GUILLEMOT	High	Feeding; documented nesting.
RIVER OTTER	High	Feeding and known latrine sites along shoreline; probable denning.
SEA OTTER	High	Feeding concentrations; pupping.
RECREATION/TOURISM	Moderate	Hunting, fishing, kayaking, and camping; adjacent to State Park and four public use cabins.

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: KIB01	PARCEL NAME: Shuyak Island	SCORE: 63.0
LANDOWNER: Kodiak Borough		PARCEL ACREAGE: 27,900

WILDERNESS	High	Little evidence of human development.						
CULTURAL RESOURCES	High	Fifteen documented sites.						
SUBSISTENCE	Low							
ECOLOGICAL SIGNIFICANCE: Anadromous fish streams also support populations of coho and chum salmon. Adjacent marine waters inhabited by Northern sea lion, porpoises and whales. Deer and brown bear on parcel.								
ADJACENT LAND MANAGEMENT: State of Alaska; Federal Aviation Administration.								
ADDITIONAL CONSIDERATIONS: Several guiding operations operate in and adjacent to Park. Land disposal possible for Shuyak Strait portion of the parcel.								
PROTECTION OBJECTIVE: 1) Maintain water quality and riparian habitats for anadromous fish, river otter and harlequin duck; 2) maintain nesting opportunities for bald eagle, marbled murrelet and pigeon guillemot; 3) minimize disturbance to nearshore and intertidal habitat use; and 4) maintain recreational opportunities.								
RANKING CRITERIA								
1	2	3	4	5	6	7	8	TOTAL
7H, 7M	Y	Y	Y	N	Y	Y	Y	63.0

¹ Parties other than landowner may own partial rights (e.g., timber, minerals).

PROFESSIONAL QUALIFICATIONS

Diane Black-Smith, MAI
Member Appraisal Institute
Member Number 6193

Education

Graduated University of Washington (1970 - 1974) - Bachelor of Arts Degree
Graduated West Anchorage High School, 1970

Appraisal Courses Successfully Completed

SREA Appraisal Course 101	University of Alaska, 1974
AIREA Appraisal Course 1B	Seattle Pacific University, 1975
SREA Appraisal Course 201	University of Alaska, 1976
SREA Appraisal Course R-2	University of Alaska, 1979
AIREA Appraisal Course II	Case Studies
	University of Colorado, 1980
	University of San Diego, 1985
AIREA Appraisal Course II	Report Writing, University of Colorado, 1980
AIREA Appraisal Course II	Standards of Professional Practice
	University of Portland, 1980
	Anchorage, Alaska, 1987
AIREA Appraisal Course IV	Litigation Valuation
	University of Colorado, 1980 & 1985
Appraisal Institute - Standards of Professional Practice Parts A & B, 1991	
IRWA Course 403	Easement Valuation, 1992
IRWA Course 802	Legal Aspects of Easements, 1992
IRWA Course 401	The Appraisal of Partial Acquisitions, 1994

Seminars

Debate and Open Forum on "Public Interest Value", American Society of Farm Managers and Rural Appraisers, November 1994

1994	Understanding Limited Appraisals & Appraisal Reporting Options
	Alaska Chapter - Appraisal Institute
1993	Market Extractions, Alaska Chapter - Appraisal Institute
1993	Appraising Troubled Properties, Alaska Chapter - Appraisal Institute
1992	Course 403 - Easement Valuation, International Right of Way Association
1992	Course 802 - Legal Aspects of Easements, International Right of Way Association
1992	Under the Microscope: Highest and Best Use, Appraisal Institute
1992	Advanced Electronic Spreadsheet Lotus 1-2-3, Appraisal Institute
1992	Residential Appraisal Reports from a Reviewer's Perspective, Appraisal Institute
1991	General and Residential State Certification Review Seminar Appraisal Institute
1988	Alaska Condemnation Law and Procedures - Instructor
1987	Capitalization Workshop

Numerous special seminars and workshops with the American Institute and Society of Real Estate Appraisers from 1974 through 1992. Accumulate an average of 20 credit hours annually for recertification credit with the Appraisal Institute.

PROFESSIONAL QUALIFICATIONS

Diane Black-Smith

Page 2

Professional Recognition

Past President (1987)	Alaska Chapter No. 57 of Real Estate Appraisers
State Coordinator (1988)	National Appointment by AIREA to represent Alaska for Legislation in the Appraisal Industry.
Board Member	Municipality of Anchorage, Board of Equalization (Alternate 1986, 1987, and 1988)
Court Experience:	Qualified as an Expert Witness in the Alaska Superior Courts and Federal Bankruptcy Court

Employment History

Black-Smith and Richards, 2602 Fairbanks Street, Anchorage, Alaska
Owner/President - Established Company in December, 1980.

Fee Appraiser June 1977 to December 1980 with Appraisal Company of Alaska, and Noey and Associates, Anchorage, Alaska

Staff Appraiser - Department of Transportation and Public Facilities, State of Alaska, June 1975 to June 1977

Appraisal Experience

Diane Black-Smith, MAI, established the firm of Black-Smith and Richards, Inc., in December of 1980. In addition to managing the business, Ms. Black-Smith is a full time commercial real estate appraiser. She is a member of the Appraisal Institute, having been awarded the MAI (Member Appraisal Institute) on November 6, 1980, Certificate Number 6193.

Ms. Black-Smith is primarily a commercial real estate appraiser, with particular emphasis in urban properties including office and retail buildings as well as industrial warehouse type properties. Approximately 20 to 40 percent of her annual assignments involve appraisals for government acquisition for road right-of-ways, parks, school sites, and remote acreage.

Property types upon which full narrative appraisal reports have been made include warehouse, office buildings, industrial plants, convenience stores and gas stations, motels, apartments, shopping centers, and numerous special purpose type properties.

The Appraisal Institute conducts a voluntary program of continuing education for its designated members. MAI's and SRA's who meet the minimum standards of this program are awarded periodic educational certification. I am currently certified under this program.

The following is a partial list of agencies and clients for whom appraisal reports and market analysis assignments have been prepared.

Texaco, Inc.	MAPCO, Inc.
Carr-Gottstein Corporation	National Bank of Alaska
Security Pacific Bank Alaska	Security Pacific Bank Washington
Alaska Railroad Corporation	The Jack White Company
First National Bank of Anchorage	Port of Anchorage (MOA)
Chrysler Corporation	U.S. Army Corps of Engineers
Municipality of Anchorage	City of Seward
Department of Housing and Urban Development	U.S. Department of the Interior

Agencies and Clients (Cont'd)

Federal Deposit Insurance Corporation
Seley Corporation
Cape Fox Corporation
Peoples Westchester Savings Bank
The Resolution Trust Corporation
The Blomfield Corporation
7-11 Alaska Corporation
ALAGCO (SeaAlaska Corporation)
Internal Revenue Service
State of Alaska

Department of Transportation and Public Facilities
Department of Fish and Game
Department of Natural Resources
Department of Law

Northrim Bank
Weidner Investment Services
Air Van Lines, Inc.
Kenai Native Association, Inc.
Tanadgusix Corporation
San Jacinto Savings Association
Cook Inlet Region, Inc.
U.S. Navy
Key Bank Alaska

References

Vivian Dietz-Clark
Municipality of Anchorage
Department of Property and Facility Management
P.O. Box 196650
Anchorage, Alaska 99519-6650
(907) 786-8368

Bill McGrew, Vice President
Office of the President
First National Bank of Anchorage
Anchorage, Alaska
(907) 265-3559

George (Rick) Kauzlarich
Appraisal Supervisor
Right-of-Way Division
State of Alaska
Department of Transportation and
Public Facilities
Anchorage, Alaska
(907) 266-1538

Mr. Mark Pfeffer, Architect
Koonce Pfeffer Inc.
745 W. 4th Avenue, Suite 400
Anchorage, Alaska 99501
(907) 274-7443

Dennis P. Drennan, SR/WA
Manager, Realty Services Branch
Western Division, Naval Facilities
Engineering Command
San Bruno, California
(415) 877-7604

Richard Todd
State of Alaska
Assistant Attorney General
Office of the Attorney General
(907) 276-3550

R. (Robert) Smith
Real Estate Agent
Marketing Department
Texaco, USA - Seattle Division
10602 NE 38th Place
Kirkland, Washington
(206) 827-0761

Mr. Alan Trawver
Trawver Land Services
7900 Upper O'Malley Road
Anchorage, Alaska 99516
(907) 346-2433

PROFESSIONAL QUALIFICATIONS

Diane Black-Smith

Page 3

References (Cont'd)

Chris Anderson, Vice President
Key Bank of Alaska
101 West Benson Boulevard
Anchorage, Alaska 99503
(907) 562-6100

Ms. Gladys M. Wilson
Municipality of Anchorage
Department of Property and Facility Management
P.O. Box 196650
Anchorage, Alaska 99519-6650
(907) 786-8396

Mr. Jim Pfanis, Loan Officer
Commercial Real Estate
National Bank of Alaska
P.O. Box 100600
Anchorage, Alaska
(907) 265-2140

Paul Kapansky
Alaska Housing Finance Corp.
520 E. 34th Avenue
Anchorage, Alaska 99503
(907) 561-1900

No. 31

Effective: 05/24/93

Expires: 06/30/95

STATE OF ALASKA

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

Division of Occupational Licensing

P.O. Box 110806, Juneau, Alaska 99811-0806

Board of Certified Real Estate Appraisers

Certifies That

DIANE L. BLACK-SMITH

Is A Certified

General Real Estate Appraiser

Commissioner, Paul Fuhs

**QUALIFICATIONS OF THE APPRAISER
STEVEN E. CARLSON**

EDUCATION

University of Alaska, Anchorage - BBA in Real Estate
Real Estate Fundamentals
Real Estate Appraising
Real Estate Investment Analysis
Real Estate Law
Real Estate Management

National Association of Realtor's Courses

Fundamentals of Real Estate, Investment and Taxation
Fundamentals of Location and Market Analysis
Advanced Real Estate Taxation and Marketing Tools for Real Estate
Impact of Human Behavior on Commercial Investment Decision Making

Appraisal Courses Taken

Course 214 - Skills of Expert Testimony, International Right of Way Association, April 1994
Course 600 - Environmental Awareness, International Right of Way Association, April 1994
Course 401 - The Appraisal of Partial Acquisitions, International Right of Way Association, April 1994
Course 410 - Standards of Professional Practice, Part A (USPAP), Appraisal Institute, January 1993
Course 420 - Standards of Professional Practice, Part B, Appraisal Institute, January 1993

Seminars Taken

Syndicating the Single Family Dwelling
Exchanging A to Z
Taxation and Estate Planning
Creative Real Estate Paper
Navigable Waters and Wetlands, International Right of Way Association, April 1994
Understanding Limited Appraisals & Appraisal Reporting Options, Appraisal Institute, July 1994
Debate and Open Forum on "Public Interest Value", American Society of Farm Managers and Rural Appraisers, November 1994

BUSINESS EXPERIENCE

Black-Smith and Richards, Inc., Appraiser
Erickson and Associates, Appraiser
Licensed Real Estate Sales Associate in 1976
Licensed as Associate Broker in 1978
Currently holds a State of Alaska Real Estate Broker's License
Development of residential lots and housing

LIMITING CONDITIONS AND ASSUMPTIONS

By this notice, all persons and firms reviewing, utilizing or relying on this report in any manner bind themselves to accept these assumptions and limiting conditions. Do not use this report if you do not so accept. The following conditions are a part of the appraisal report, they are a preface to any certification, definition, fact or analysis, and are intended to establish as a matter of record that the appraiser's function is to provide a present market value indication for the subject property based upon the appraiser's observations as to the subject property and real estate market. This appraisal report is an economic study to estimate value as defined in it. It is not an engineering, construction, legal or architectural study nor survey and expertise in these areas, among others, is not implied.

Limit of Liability

The liability of Black-Smith & Richards, Inc., and employees and affiliated independent contractors, is limited to the client only and to the fee actually received by appraiser (total per appraiser). Further, there is no accountability, obligation, or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The Appraiser is in no way to be responsible for any costs incurred to discover or correct any deficiencies of any type present in the property; physically, financially, and/or legally. In the case of limited partnerships or syndication offerings or stock offerings in real estate, client agrees that in case of lawsuit (brought by lender, partner or part owner in any form of ownership, tenant, or any other party), any and all awards, settlements of any type in such suit, regardless of outcome, client will hold Appraiser completely harmless in any such action.

Copies, Publication, Distribution, Use of Report

Possession of this report or any copy thereof does not carry with it the right of publication, nor may it be used for other than its intended use; the physical report(s) remain the property of the Appraiser for the use of the client, the fee being for the analytical services only.

The Bylaws and Regulations of the Appraisal Institute of the National Association of Realtors require each Member and Candidate to control the use and distribution of each appraisal report signed by such Member or Candidate; except as hereinafter provided, the client may distribute copies of this appraisal report in its entirety to such third parties as he may select; however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatories of this appraisal report. Neither all nor any part of this appraisal report shall be disseminated to the general public by the use of advertising media, public relations, news, sales or other media for public communication without the prior written consent of appraiser. (See last item in this list for client agreement/consent.

Confidentiality and Use

This appraisal is to be used only in its entirety and no part is to be used without the whole report. All conclusions and opinions concerning the analysis as set forth in the report were prepared by the Appraiser(s) whose signature(s) appear on the appraisal report, unless indicated as "Review Appraiser". No change of any item in the report shall be made by anyone than the Appraiser and/or officer of the firm. The Appraiser and firm shall have no responsibility if any such unauthorized change is made.

The Appraiser may not divulge the material (evaluation) contents of the report, analytical findings or conclusions, or give a copy of the report to anyone other than the client or his designee as specified in writing except as may be required by the Appraisal Institute as they may request in confidence for ethics enforcement, or by a court of law or body with the power of subpoena.

Trade Secrets

This appraisal was obtained from Black-Smith & Richards, Inc., or related independent contractors and consists of "trade secrets and commercial or financial information" which is privileged and confidential and exempted from disclosure under 5 U.S.C. 552 (b) (4). Notify the Appraiser(s) signing report or an officer of Black-Smith & Richards, Inc., of any request to reproduce this appraisal in whole or part.

Information Used

No responsibility is assumed for accuracy of information furnished by work of or work by others, the client, his designee, or public records. We are not liable for such information or the work of possible subcontractors. Be advised that some of the people associated with Black-Smith & Richards, Inc., and possibly signing the report, are independent contractors. The comparable competitive data and market information relied upon in this report has been confirmed, to the extent reasonably possible, with one or more parties familiar with the transaction or from affidavit or other source though reasonable; all are considered appropriate for inclusion to the best of our factual judgment and knowledge. An impractical and uneconomic expenditure of time would be required in attempting to furnish unimpeachable verification in all instances, particularly as to engineering and market-related information. It is suggested that the client consider independent verification as a prerequisite to any transaction involving sale, lease, or other significant commitment of funds or subject property.

Testimony, Consultation, Completion of Contract for Appraisal Service

The contract for appraisal consultation or analytical service is fulfilled, and the total fee is payable upon completion of the report. The Appraiser(s) or those assisting in preparation of the report will not be asked or required to give testimony in court or hearing because of having made the appraisal, in full or in part, nor engage in post appraisal consultation with client or third parties except under separate and special arrangement and at additional fee. If testimony or deposition is required because of any subpoena, the client shall be responsible for any additional time, fees, and charges regardless of issuing party.

Exhibits

The generalized sketches and maps in this report are included to assist the reader in visualizing the property and are not necessarily to scale. . Site plans are not surveys unless shown from separate surveyor.

Property Components, Soils and Legal Considerations

The appraiser and/or firm has no responsibility for matters legal in character or nature, nor of any architectural, structural, mechanical, or engineering nature. No opinion is rendered as to the title, which is presumed to be good and merchantable. The property is appraised as if free and clear, unless otherwise stated in particular parts of the report.

The legal description is assumed to be correct as used in this report as furnished by the client, his designee, or as derived by the Appraiser.

Please note that no advice is given, or opinion implied other than stated in this report, regarding mechanical or plumbing equipment, structural integrity or adequacy, nor soils and potential for settlement, drainage, and such (seek assistance from qualified architect and/or engineer) nor matters concerning liens, title status, and legal marketability (seek legal assistance), and such. The lender or owner may wish to require mechanical or structural inspections by qualified and licensed contractor, civil or structural engineer, architect, or other expert.

The Appraiser has inspected as far as possible, by observation, the land and the improvements; however, it was not possible to personally observe conditions beneath the soil or hidden structural, or

other components. We have not critically inspected mechanical components of any type within the improvements and no representations are made herein as to (or to) these matters unless estimate considers there being no conditions that would cause a loss of value.

Dollar Values, Purchasing Power

The market value estimated, and the costs used, are as of the date of the estimate of value. All dollar amounts are based on the purchasing power and price of the dollar as of the date of the value estimate.

Inclusions

Furnishings and equipment or personal property or business operations, except as specifically indicated and typically considered as a part of real estate, have been disregarded with only the real estate being considered in the value estimate unless otherwise stated. In some property types, business and real estate interests and values may be and are combined.

Proposed Improvements, Conditioned Value

Improvements proposed, if any, on or off-site, as well as any repairs required are considered for purposes of this appraisal to be completed in good and workmanlike manner according to information submitted and/or considered by the appraisers. In cases of proposed construction, the appraisal is subject to change upon inspection of the property after construction is completed. This estimate of market value is as of the date shown, as proposed, as if completed and operating at levels shown and projected or as specifically labeled in the report.

Market Value: Defined, In Report, Change, Dynamic Market, Influences, Alteration of Estimate by Appraiser

The estimated market value, which is defined in the report, is subject to change with market changes over time; value is highly related to exposure, time, promotional effort, terms, motivation, and conditions surrounding the offering. The value estimate considers the productivity and relative attractiveness of the property physically and economically in the marketplace.

In cases of appraisals involving the capitalization of income benefits, the estimate of market value or investment value or value in use is a reflection of such benefits and Appraiser's interpretation of income and yields and other factors derived from general and specific client and market information.

Such estimates are as of the date of the estimate of value; they are thus subject to change as the market and value is naturally dynamic.

The "Estimate of Market Value" in the appraisal report is not based in whole or in part upon the race, color or national origin of the present owners or occupants of the properties in the vicinity of the property appraised.

Appraisal report and value estimate subject to change if physical or legal entity or financing different than that envisioned in this report.

The land or soil of the area being appraised appears firm, unless otherwise noted; however, subsidence in the area is unknown. The Appraiser(s) do not warrant against this condition or occurrence or problems arising from soil conditions. The appraisal is based on there being no hidden, inapparent, or apparent conditions of the property site, subsoil, or structures or toxic materials which would render it more or less valuable. The appraiser and firm have no responsibility for any such condition or for any such conditions or for any expertise or engineering to discover them. All mechanical components are assumed to be in operable condition and status standard for properties of the subject type. Conditions of heating, cooling, ventilating, electrical and plumbing equipment is considering to be commensurate with the condition of the balance of the improvements unless otherwise stated. No judgment may be made by us as to adequacy of insulation, type of insulation, or energy rating or

energy efficiency of the improvements or equipment which is assumed standard for subject age and type.

If the Appraiser has not been supplied with a water and sewer adequacy test, survey or occupancy permit, no responsibility or representation is assumed or made for any costs associated with obtaining the above mentioned items. The Appraiser has no responsibility for any costs or consequences arising due to the need, or the lack of need for flood hazard insurance. An Agent for the Federal Flood Insurance Program should be contacted to determine the actual need for Flood Hazard Insurance.

Legality of Use

The appraisal is based on the premise that, there is full compliance with all applicable federal, state and local environmental regulations and laws unless otherwise stated in the report; further, that all applicable zoning, building, use regulations and restrictions of all types have been complied with unless otherwise stated in the report; further, it is assumed that all required licenses, consents, permits, or other legislative or administrative authority, local, state, federal and/or private entity or organization have been or can be obtained or renewed for any use considered in the value estimate.

Component Values

The distribution of the total valuation in this report between land and improvements applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used.

Auxiliary and Related Studies

No environmental or impact studies, special market study or analysis, highest and best use analysis study or feasibility study has been requested or made unless otherwise specified in an agreement for services or in the report.

Management of the Property

It is assumed that the property which is the subject of this report will be under prudent and competent ownership, care and management; being neither inefficient nor super-efficient.

Continuing Education Current

The Appraisal Institute conducts a mandatory program of continuing education for its designated members; MAI Designates who meet the minimum standards of this program are awarded periodic educational certification and; MAI(s) signing the report is/are currently under this program.

Authentic Copies

The authentic copies of this report are signed in blue ink. Any copy that does not have the above is unauthorized and may be altered.

Insulation and Toxic Materials

Unless otherwise stated in this report, the Appraiser(s) signing this report have no knowledge concerning the presence or absence of toxic materials and/or urea-formaldehyde foam insulation in existing improvements; if such is present the value of the property may be adversely affected and reappraisal at additional cost necessary to estimate the effects of such. It is assumed there are no hazardous wastes buried or otherwise deposited on or under or dangerously near the subject site. No visual evidence of such waste was noted in the inspection, but no studies have been done to determine the presence or absence of such hazardous wastes; the appraiser has no liability for any hazardous material that may be found to be present or to affect the site.

Review

Unless otherwise noted herein, named review Appraiser of/from Black-Smith & Richards, Inc., has reviewed the report only as to general appropriateness of technique and format, and has not necessarily inspected the subject or market comparable properties.

Changes, Modifications

The Appraisers and/or officers of Black-Smith & Richards, Inc., reserve the right to alter statements, analysis, conclusion or any value estimate in the appraisal if there becomes known to us facts pertinent to the appraisal process which were unknown to us when the report was finished.

Acceptance of, and/or use of, this appraisal report by client or any third party constitutes acceptance of the above conditions. Appraiser liability extends only to stated client, not subsequent parties or users of any type, and the total liability of appraiser and firm is limited to the amount of fee received by appraiser. Retention and or use of the report signifies acceptance of all assumptions and limiting conditions specified.