

Resource Management Committee Quarterly Meeting

October 26, 2016

Protecting and enhancing the value of Alaska Mental Health Trust Lands while maximizing revenues from those lands over time.

ALASKA MENTAL HEALTH TRUST AUTHORITY RESOURCE MANAGEMENT COMMITTEE MEETING DRAFT AGENDA OCTOBER 26, 2016 1:00pm to 2:30pm

<u>Teleconference Information</u> Call in Number: (866) 469-3239 Meeting/Session Number: 801 008 432 # Attendee Number: #

Call to Order (Chair Carlton Smith) Committee Members (Voting): Laraine Derr Paula Easley Mary Jane Michael Larry Norene Jerome Selby Russ Webb John Morrison, Staff Announcements Approval of Agenda Approval of Minutes a. August 11, 2016

- 1. Executive Director Report
- 2. Approval
 - a) Icy Cape Gold and Industrial Heavy Minerals Project (Item 1)

3. Consultation

- a) Alaska Natural Gas Negotiated Lease (Item A)
- b) Lot C2 Negotiated Sale Juneau Subport Subdivision (Item B)

4. Consultation Reconsideration

- a) Petersburg Timber Harvest (Item I)
- b) Ketchikan Timber Harvest (Item II)
- 5. Other
- 6. Adjourn

ALASKA MENTAL HEALTH TRUST AUTHORITY RESOURCE MANAGEMENT COMMITTEE MEETING

August 11, 2016 8:30 a.m.

Taken at:

3745 Community Park Loop, Suite 120 Anchorage, Alaska

OFFICIAL MINUTES

Trustees present: Larry Norene, Chair Carlton Smith Laraine Derr Russ Webb Paula Easley Mary Jane Michael Jerome Selby

Trust staff present: Jeff Jessee Steve Williams Miri Smith-Coolidge Amanda Lofgren Kevin Buckland Mike Baldwin Katie Baldwin-Johnson Heidi Wailand Luke Lind Kat Roch Valette Keller

TLO staff present: John Morrison Wyn Menefee Craig Driver Karsten Eden Sarah Morrison Paul Slenkamp

Others participating: Sue Woods, Petersburg, Alaska

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PROCEEDINGS

CHAIR NORENE calls the Resource Management Committee meeting to order. He states that Carlton Smith will be late and he wants to be involved with a particular issue of concern. He continues that there is a change in the agenda and asks that the director's report be presented early.

TRUSTEE SELBY makes a motion to approve the agenda, as amended.

TRUSTEE MICHAEL seconds.

CHAIR NORENE moves to the minutes of April 14, 2016.

TRUSTEE SELBY makes a motion to approve the minutes of April 14, 2016.

TRUSTEE MICHAEL seconds.

There being no objection, the motions are approved.

CHAIR NORENE moves to the minutes of May 2, 2016.

TRUSTEE SELBY makes a motion to approve the minutes of May 2, 2016.

TRUSTEE MICHAEL seconds.

There being no objection, the motion is approved.

CHAIR NORENE moves to the director's report and recognizes Mr. Morrison.

MR. MORRISON begins by sharing a few pictures starting with some of the Cat Island timber harvest which was consulted on a few short months ago.

MR. SLENKAMP states that the timber sale went quite smoothly. There were some public concerns prior to the sale, but since the timber sale commenced with the logging, which will be finished soon, there has been no public comment, negative comments or calls about it. It was a very successful operation and may exceed the \$500,000 return that was initially anticipated.

MR. MORRISON moves to an update on the Chuitna Mine issue, and goes through the slides and the graphics, explaining as he goes along. He states that a determination was made on an area identified as a traditional cultural landscape. The Corps originally declined to make a determination because not enough evidence was produced. He continues that the State Historical Preservation Office declined to comment one way or the other on the interpretation. He adds that the next step is that it is currently headed to the Keeper in Washington, D.C. for a final determination. This will continue to be monitored. Another struggle that Chuitna is facing, which has not yet been determined, is the water reservation issue. An initial reservation of water

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has been made on some of the lower parts of the streams leading from the mine site. He continues that the Trust was approached by the City and Borough of Yakutat with a need in their community for new residential parcels, and they do happen to have a platted subdivision. He states that, to test the market, a special land sale was held. He reports that three of the six lots sold for a total of \$166,000, which is 17-and-a-half percent over appraised value. He continues that some additional parcels that are specially selected will be added into another land sale to try to get some more value out of this before taking the next step of putting the roads in. He moves on, stating that an online application solution has been developed that prompts an applicant to enter the data and then delivers that data in an electronic format where it can be moved through the approval system within the office. He continues that it also dovetails with a system that allows a more efficient identification of a parcel of land that someone is interested in. He adds that on the website there is a link to begin this system with step-by-step instructions. It also allows online payment for application fees. When "submit" is clicked, the applicant gets to keep a copy and it also submits a copy, which prevents duplication of efforts to enter the data and helps in the approval process. He states that staff has developed this from the ground up and, in its beta stage, has proven to be very useful. He moves on to a quick update on the land exchange and states that Wyn Menefee was critical in getting through the Legislature a bill that helps facilitate the State side of the land exchange process. He continues that it was passed and signed by the Governor. He states that the successful closing of the Austin acquisition occurred on August 2nd, and reports that it went smoothly and we have taken ownership. He continues that, currently, there are three separate licensees or vendors that have recently declared bankruptcy. Link American Energy declared bankruptcy. They were working on the underground coalbed methane project in Tyonek and elsewhere. He continues that Black Range Minerals, who held the lease on the only coast prospect with a mine permit on property the Trust owns, declared bankruptcy and walked away from their project. Apache let their leases expire and are no longer active in the State.

TRUSTEE DERR asks about Chickaloon.

MR. MORRISON replies that Chickaloon is Riversdale and they are not bankrupt, but there is no guarantee. He states that the PRI position recruitment has ended, and we were able to discuss an offer with the top candidate. He continues that he has not yet heard back from the Governor's Office about an acceptance or not. He concludes his update.

TRUSTEE DERR asks if Karsten will speak about the trip to Yakutat.

MR. MORRISON replies that Dr. Eden is prepared to give a presentation, and recognizes him.

DR. EDEN begins with his update on the Icy Cape Gold Industrial Heavy Minerals Project and states that the project started thirteen months ago with just satellite imagery and no information except for a report from '95 that mentioned there was gold there and a potential for heavy minerals. He continues that he developed a geological model for the area with two different

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geomorphic provinces: the coastal plain, with individual terraces and strandlines, and the delta area. Both contain industrial heavy minerals and placer gold. He states that Phase No. 1 was completed a few months ago and goes through explaining some of the results. He continues that Phase 2 was run this summer with the goal of collecting a few tons of heavy mineral concentrates that are being shipped out and separated into the different individual mineral concentrates for industrial testing. He adds, that campaign was a big success and gained a lot of valuable knowledge for next year. He goes through some pictures of the different activities, explaining as he goes along. He states that it is an interesting project which is gaining international recognition and attention. He adds that Phase 2 is still continuing, and that Phase 3 will start next year with a need to do stratigraphic and resource drilling in order to attract key industry to invest. He thanks all.

MR. MORRISON thanks Dr. Eden and states that he would be happy to hear some of the trustees' insights from the site visit. He asks for any questions or comments.

TRUSTEE SMITH asks if Dr. Eden could share the difference between this site and a hard-rock site.

DR. EDEN replies that if this site will go into production in the future, it will not be a hard-rock operation, but a soft-rock operation, which is a placer mine. He states that different rules and regulations apply in terms of permitting. Future mining will be very simple. There are only two ways to do this: dry mining or wet mining with either a backhoe operation or a dredge. He continues that the dry parts will be focused on first, which are the easier accessible ones, and it would be a backhoe operation.

MR. MORRISON states that this is easier from a regulatory standpoint because there is no chemical separation or other issues of that nature.

CHAIR NORENE thanks both and points out that Trustee Smith is present. There is a full complement of trustees, and continues with the agenda.

TRUSTEE WEBB comments that this approach to this particular piece of property looks to be the type of strategic approach that should probably be taken in terms of learning as much as possible about the value and developing that information to the point that the value to the Trust is increased and then move forward in developing. He also states appreciation for Dr. Eden's work and vision.

TRUSTEE SELBY commends staff on this whole report and appreciates the good job.

CHAIR NORENE moves forward on the agenda under "approvals."

MR. MORRISON adds that there is one more update and shares the results from the FY16 real estate plan.

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CHAIR NORENE thanks Mr. Morrison and states that Item 1 is the Fahrenkamp Center to increase its operating funding.

MR. MORRISON states that Craig Driver, Asset Manager, is here to make the presentation for the Fahrenkamp Center. He adds that, for clarity, this is called Item A.

MR. DRIVER states that this approval request is pretty straightforward, and explains it in great detail. He continues that the previous approved amount for operating expenses was approximately \$63,000 for the fiscal year. With the six months of additional vacancy, that new number is approximately \$95,000. He adds that in the budgeted amount of \$166,000 total, there is an earmark for \$70,000 for a roof replacement project during this fiscal year. He states that the proposal is to approve an additional appropriation of \$32,000, in addition to what was approved in May.

TRUSTEE SELBY <u>makes a motion that the Resource Management Committee recommends that</u> the Alaska Mental Health Trust Authority Board of Trustees approve additional funding for expenditures on the Fahrenkamp Center property in the amount of \$32,000 for fiscal year '17, which appropriation shall not lapse.

TRUSTEE WEBB seconds.

MR. BUCKLAND states that the RMC has the ability to approve up to \$50,000 on project-specific expenditures. This does not require referral to the Full Board.

TRUSTEE SELBY <u>makes an amendment to the motion, changing it to "the Resource</u> <u>Management Committee approves."</u>

TRUSTEE WEBB seconds.

There being no objection, the motion is approved.

CHAIR NORENE asks Mr. Buckland for comments on proposed motion No. 2.

MR. BUCKLAND replies that he does not think a motion No. 2 is necessary if the trustees are all okay with him transferring the money upon request.

CHAIR NORENE moves on to the next item.

TRUSTEE DERR <u>makes a motion to recommend that the Alaska Mental Health Trust Authority</u> <u>Board of Trustees approve the Trust Land Office operating budget for FY18 in the amount of</u> <u>\$4,473,600.</u>

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TRUSTEE SELBY seconds.

There being no objection, the motion is approved.

CHAIR NORENE asks anyone on the line to hang up and call back in 30 minutes because of Executive Session.

MS. WOODS states that she is Sue Woods from Petersburg and had called in to listen to the update on the land exchange, which was appreciated.

CHAIR NORENE says it may be in her interest to call back and moves forward into Executive Session.

(Executive session from 9:27 a.m. to 10:40 a.m.)

CHAIR NORENE states that they are back from Executive Session and calls the meeting back to order. He moves to consultations, beginning with Item A, timber sale, the K3 Timber Sale in Ketchikan. He recognizes Paul Slenkamp.

MR. SLENKAMP states that he is senior resource manager with the Trust Land Office and introduces the proposal to harvest timber in Item A, which is Petersburg. He continues that this is the P-1 Timber Sale, MHT 9100855. This was originally put before the trustees on October 7, 2005, under MHT 9100411. It comprises basically 2600 acres of land close to the community of Petersburg. The anticipated partial cut volume of 17,500,000 feet with a revenue projection of \$2,673,250 to principal and \$471,522 to income. He states that this sale is happening after ten years of negotiation for a land exchange with the U.S. Forest Service in various communities through Southeast. After great due diligence by the Trust and the Forest Service, this land exchange has become uneconomical. He continues that there is legislation introduced in the Senate, S-3006, at this time to move this land exchange forward. He explains in greater detail and states that it would be in the best interest of the Mental Health Trust to harvest this timber and fulfill the mandate of providing revenue for Trust assets to beneficiaries in the event that we cannot move the land exchange forward.

TRUSTEE WEBB makes a motion that the Resource Management Committee recommends that the Alaska Mental Health Trust Authority Board of Trustees concur with the disposal of timber through a negotiated sale on Trust land near Petersburg, as proposed, no later than January 15, 2017, unless legislation directing the Secretary of Agriculture to effect an exchange of land from the Forest Service to the Trust is passed affecting the subject parcel.

TRUSTEE SELBY seconds.

TRUSTEE WEBB clarifies, on the record, his understanding of the circumstance. He states that the timber industry is, essentially, in a position where there is no timber available and is dying, and within a year or less will exit Alaska, specifically Southeast Alaska. He continues, that would reduce the potential value of any timber lands that the Trust owns in Southeast Alaska to virtually nothing. He states that either a land exchange be brought about, which has been under discussion for ten years, or begin to harvest the timber and get the value out of the land.

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There being no objection, the motion is approved.

CHAIR NORENE moves to another timber sale, Item B, which is essentially the same situation. He recognizes Mr. Slenkamp.

MR. SLENKAMP states that this is timber sale K-3, MHT 9100854, and is comprised of about 898 acres, about 10 million board feet, located south of Ketchikan, with anticipated revenue in principal of \$1,785,000 and \$335,000 in income. He continues that this is much the same situation as in Petersburg. This involved a land sale back in 2002, and explains more fully. He recommends moving forward with this timber sale.

TRUSTEE WEBB <u>makes a motion that the Resource Management Committee recommends that</u> the Alaska Mental Health Trust Authority Board of Trustees concur with the disposal of timber through a negotiated sale on Trust land near Ketchikan, as proposed, no later than January 15, 2017, unless legislation passes Congress directing the Secretary of Agriculture to exchange land of equal value to the subject parcel to the Trust.

TRUSTEE SELBY seconds.

There being no objection, the motion is approved.

CHAIR NORENE states that there are no further items on the Resource Management Committee agenda and asks if the trustees have any comments.

TRUSTEE WEBB states that it will be expected that these actions will not be viewed positively by all and it is incumbent on the Trust to move forward as quickly as possible and suggests that these actions go forward to the Full Board. He suggests that, once these are passed, staff begin the process of informing affected parties of these actions and explaining the reasons for the action and the basis to retain the value and gain that value from the land in the hope of gaining support and understanding of the interests of beneficiaries.

CHAIR NORENE asks for any other comments.

MR. MORRISON adds to remind people that at the beginning of the Trust Land Office existence, that timber was almost the sole provider of revenue to the Trust, and over the course of time has provided roughly 40 percent of all the revenue the TLO has earned.

TRUSTEE SELBY makes a motion to adjourn the committee meeting.

TRUSTEE EASLEY seconds.

There being no objection, the meeting is adjourned.

CHAIR NORENE thanks all.

(Resource Management Committee adjourned at 11:00 a.m.)

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To:Carlton Smith, Chair
Resource Management CommitteeFrom:Dr. Karsten Eden, CPG, EurGeolDate:10/12/2016Re:Icy Cape (Item 1)Fiscal Year:2017



Proposed RMC Motion:

Proposed Motion One: "The Resource Management Committee recommends that the Alaska Mental Health Trust Authority board of trustees approve the formation of an entity by the Trust Land Office (TLO), for the purpose of advancing the Icy Cape Gold and Industrial Heavy Minerals Project by developing and operating the Icy Cape mineral property and forming joint ventures (JVs).

Proposed Motion Two: "The Resource Management Committee recommends the Alaska Mental Health Trust board of trustees authorize the Executive Director of the TLO to represent the Trust's interests in the project to ensure a successful operation, including but not limited to modifications to the project plan, sale of mined goods, financing or other capital considerations, and transactions with JV partners at appropriate junctures."

Proposed Motion Three: "The Resource Management Committee recommends that the Alaska Mental Health Trust Authority board of trustees approve the proposed action to fund the newly formed entity with principal from the Trust Authority Development Account (TADA) fund code 3320 with \$2M. These funds do not lapse."

Proposed Motion Four: "The Resource Management Committee recommends the Alaska Mental Health Trust board of trustees delegate to the Executive Director of the TLO the authority to determine if it is necessary to modify or cancel these transactions."

Proposed Motion Five: "The Resource Management Committee recommends the Alaska Mental Health Trust board of trustees concur with the leasing of the parcel know as Icy Cape to the newly formed entity for the purposes of pursuing a mine"

Background:

Transaction/Resource: Form an entity to develop mineral resources independently or through JVs with other commercial interests. Lease the property known as Icy Cape to the newly formed entity. Fund the newly formed entity with \$2M to conduct stratigraphic framework and resource drilling,

improve existing field camp and infrastructure, acquire, equip, and deploy a laboratory for on-site preliminary sample analyses in support of targeted drilling, purchase vehicles and equipment for field work, legal services, and to establish short turn-around-time resource analysis services.

Property Description/Acreage/MH Parcel(s): All of MHT parcels no. CRM-0001, CRM-0002, CRM-0003, CRM-0004, CRM-0005, CRM-0006, CRM-0007A, CRM-0008 and CRM-0009 of the Icy Cape Block, located in CO22S019E, CO22S020E, CO22S021E and CO22S022E and subtends about 48,000 acres.

Proposed Actions: There are three proposed actions:

- 1. Formation of the entity for Icy Cape Gold and Industrial Heavy Minerals Project
- 2. Leasing of Icy Cape property to the newly formed entity
- 3. Approve funding the entity for:
 - a. Stratigraphic and resource drilling
 - b. Camp upgrades and infrastructure updates
 - c. Other items needed for successful project

General Background: TLO's Icy Cape property is located in the Gulf of Alaska near Icy Bay about 75 miles (120 km) northwest of Yakutat (Exhibit A). Placer gold in garnet-rich sands ("ruby sands") have been described in this region and explored for/exploited since the early 1900s. In 1992, Paraclete Resources, Inc. outlined five prospective areas for placer gold, estimated a total 3.5M troy ounce resource in the western portion of the property. This estimate is not compliant with CIM and SME definition standards for Mineral Resources and Minerals Reserves, as defined under NI43-101. Since 1996, when land and minerals ownership of the Icy Cape Block (henceforth Block) was transferred from the State of Alaska to the Alaska Mental Health Trust Authority no mineral-resource related activity has been conducted there.

Glacio-fluvial, deltaic, and shoreline features cover the surface, but their lateral and vertical distribution in the subsurface are unknown. Stratigraphic framework drilling, therefore, is a critical component of this Consultation.

The Block is in a remote area in the Gulf of Alaska. It is poorly accessible and its single existing road is in inadequate condition to traverse the length of the area. Bridges are in need of repair or absent. Logging roads perpendicular to the single road were last used in 2002. They are overgrown with alder and locally washed out. Older logging roads are completely overgrown. Access to targeted drill sites in the lowlands and uplands adjacent to the single road is thus not possible without improvements, and in some cases new roads will have to be constructed. Some areas are accessible only by helicopter.

The Minerals & Energy (M&E) Section of the TLO identified this Block as prospective for placer gold and for associated HM as added value in gold exploitation. M&E conceived, designed, and initiated the Icy Cape Gold and Industrial Heavy Minerals Project (henceforth Project) in July 2015. Designed as a staged and incremental effort, the Project's focus is evaluation of the potential for industrial HM (for example garnet, zircon, and rutile) as co-products of gold exploitation.

All aspects of Phase 1, 2, and proposed Phase 3 have been supervised and managed by TLO's Certified Professional Geologist, a Qualified Person as defined in National Instrument 43-101. This assures that

mining industry standards are followed, and certify that guidelines of NI43-101, JORC and SAMREC will be met or exceeded.

In Phase 1 of the Project, technical literature and unpublished TLO archive documents were compiled and analyzed, and a preliminary geological mineral-resource map was compiled. HM concentrates were collected in the field, and over 100 samples from pre-TLO ownership reconnaissance samples were analyzed for their mineralogical compositions. These samples were retrieved from the Geologic Materials Center in Anchorage.

Phase 1 results confirm potential for gold and identify and quantify garnet and other HM as prospective co-products. These minerals comprise the majority of the HM group. Eden et al., 2016 (Exhibit B) estimate the Block to contain in excess of 2 billion tons of sediments to 35 feet below the surface. (NOTE: During field work in July 2016 we mapped ancient beach sediments in coast-parallel terraces 2 miles inland and over 150 feet above sea level).

In Phase 2 of the Project (started in July 2016), field crews collected exploration samples totaling more than 4,000 pounds for laboratory studies. Samples were collected by use of backhoe, hand dug pits, channel samples of road cuts, and hand-held augers. On-site reconnaissance panning showed all samples have gold and HM.

Phase 2 samples are at the contracted HM laboratory for test work. In the laboratory, samples will be processed by industry-specific methods and standards to produce mineral concentrates for industrial testing, application, marketing, and thus, foster and expedite development of gold and HM in the Block.

During August 2016, the TLO contracted for a low-altitude high-resolution aeromagnetic survey over the coastal sediments of the Block. Such airborne data delineate variations in magnetic intensity of shallow subsurface geologic material. Areas with higher than adjacent magnetism (anomalies) are projected to be associated with HM placers (that include gold), and help locate drilling-exploration targets. Magnetism maps show patterns consistent with our geologic and deposit models of the Block.

Stratigraphic framework and resource assessment drilling (Phase 3) will be conducted in June, July and August of 2017. Framework drilling will enable an understanding of the geologic history of subsurface sediments and also provide samples sufficiently large for gold and HM analyses. Drilling will be based on results of Phase 2. The benefits of the stratigraphic and resource drilling are that they provide critical measures of vertical and lateral extent of mineralization, information on mineral recovery, mineral processing and mineral separation procedures leading to a pilot plant design. Forming the entity and conducting the drilling program will significantly upgrade the property's value and therefore increase its marketability.

The plan is for a field crew of 10 personnel, not including short-term visits by executives, technical advisors, and commercial interests. It is necessary to acquire and deliver to the site a camp facility, infrastructure, and field transportation prior to the drilling campaign.

Communication of M&E's exploration results has gained international attention and support. The M&E leveraged its small reconnaissance budget for Phase 1 by attracting a major HM mining corporation's interest and thereby tripled its budget. Again, in Phase 2, M&E leveraged the budget by gaining in-kind technical field support from the HM industry.

The Project will demonstrate that the Block can produce gold commercially along with HM in bulk tonnage over an extended period of time. It is likely that there are at least two deposit types; smaller high-grade and larger, though lower grade. Depending on the results of Phase 3, future exploitation of smaller high-grade deposits will most likely occur through the suggested entity that can mine and market mineral products independently for higher ROI. Exploration drilling will also reveal the larger, though lower grade deposits for which the entity will likely negotiate JVs with mining companies, mineral producers, and/or investment groups. In either case, it is optimal to retain managing control, through the newly formed entity, of the Block's mineral resources and their commercial development.

Phase 4, would consist of a test mining operation through the entity with a pilot plant for producing gold and industrial heavy mineral products for sale.

Anticipated Revenues/Benefits: Icy Cape is a unique minerals prospect. It has the potential to become the Trust's flagship property and to outperform any other mineral property the Trust owns in revenue generation over decades to come. It is likely that a successfully developed project would at least triple our annual mineral revenues. Developing the project through an entity formed for the purpose will allow the greatest value to be realized for the Trust and allow for certain strategies such as joining with future JV partners which will permit a major stake and controlling interest in the project. This, in turn, offers significantly higher revenue potential than traditional leasing. The judicious use of this entity, initially for exploration, will accelerate resource development leading to a long term optimal revenue stream for the Trust. Once mining begins revenue will come from the sale of gold, garnet, other HM, and JV interests.

Anticipated Risks/Concerns: As in any mining and mineral-resource ventures there are inherent risks and concerns. Although there is a possibility that drilling analyses might indicate low resource potential in the Block, magnetic, geologic, and other adjunct data, including field observations and ongoing laboratory analyses indicate otherwise.

Project Cost Estimate: The drilling program, sample analysis, infrastructure improvements, purchasing of vehicles and logistics, (that is, Phase 3) are estimated at \$1.75M (Exhibit C).

Other Considerations: The Icy Cape Block is within the Yakutat gold province. In this province active placer gold mining on State-owned beaches adjacent to the Block demonstrates and underscores the resource-fertile characteristics of this property.

Due Diligence: The TLO M&E Section Chief and other staff are familiar with the resource potential of the Block. They have researched, inspected, and sampled the property repeatedly, and conducted Phase 1 and Phase 2 exploration programs that included participation in laboratory analyses. The importance of forming an entity for the purposes of conducting the stratigraphic and resource drilling program were determined by lengthy internal analysis and review of published and internally

produced exploration data and reports. Market analysis, consultation with industry-expert exploration and resource assessment parties were also conducted. By the due diligence process the M&E also identified a uniquely suited contractor with domestic and international placer expertise with a state-of-the-art HM analytical laboratory to conduct analyses.

Alternatives: Do nothing and hope that someday industry will approach TLO for appropriate leasing opportunities.

Consistency with the Resource Management Strategy: This proposal is consistent with the "Resource Management Strategy for Trust Land" (RMS), which was adopted January 2016 in consultation with the Trust and provides for the TLO to focus first on land or resources at the high end of their market values ("best markets"). It is an organizational mandate for the TLO to maximize its income base by developing its natural resources. Further, the RMS clearly states that the TLO needs to adapt to new commodity market and industry situations, and therefore, develop business opportunities.

Trust Land Office Recommendation: The TLO recommends the allocation of principal funds to form and fund the entity and to complete a lease with the entity so that it can conduct the drilling and analysis campaign at Icy Cape (Phase 3).

Applicable Authority: Alaska Statutes 36.30.850(b)15(B), 37.14.009(a), 38.05.801, and regulations 11 AAC 99, 20 AAC 40.700 (key statutes and regulations applicable to Trust land management and disposal).

Trust Authority Consultation: This briefing document fulfills the consultation requirements that are applicable to the transaction.

Exhibit(s): Exhibit A – Icy Cape land block map

Exhibit B—Eden, K., Grosz, A.E., Grosz, J.E., Giles, C.J., and Foley, J.Y., 2016. Gold and associated industrial heavy minerals in the Icy Cape District: White River to Icy Cape, Alaska, USA, 10th International Heavy Minerals Conference, Sun City, 16-17 August 2016, SAIMM, pp. 195 – 206.

Exhibit C – Phase 3 budget estimate

Exhibit A: Icy Cape Land Block





Item 1 - Exhibit A Icy Cape Land Block RMC 10-26-2016

Gold and associated industrial heavy minerals in the Icy Cape District: White River to Icy Cape, Alaska, USA

K. Eden¹, A.E. Grosz², J.E. Grosz², C.J. Giles², and J.Y. Foley³

¹Trust Land Office, Anchorage, AK, USA ²Global Mineral Sands, Inc. Herndon, VA, USA ³Exploration Geologist (Retired), Anchorage, AK, USA

Portions of the Icy Cape placer Au district have been described and exploited since the early 1900s. Industrial studies of Au-bearing garnet-rich intervals promoted a 3.5 million troy ounces resource in the western half of the district. This estimate is not compliant with CIM and SME definition standards for Mineral Resources and Mineral Reserves. We note high variability in the textures of sediments and their heavy mineral (HM) content and composition in the district, probably as a function of depositional environment. Sediments are medium- to fine-grained sands with a valuable HM assemblage that averages 26.0% in a range of 1.1% to 72.6%. Valuable heavy minerals (VHMs) garnet, magnetite, ilmenite, rutile, and zircon, but not including Au, average 7.9% in a range of 1.0% to 37.6% of the HM assemblage. Trace quantities of uraninite, thorite, monazite, xenotime, and others are noted. Analyses show garnets have an average Y content of 726 ppm in a range of 0-2150 ppm. Energy-dispersive X-ray fluorescence confirms compositions commensurate with Ca, Al, and Mg silicates. In this brief report we provide empirical analytical data and note high variability in the textures, HM content, and compositions as a probable function of depositional environment. Icy Cape District land and resources are owned by the Alaska Mental Health Trust Authority and managed by the Trust Land Office (TLO).

INTRODUCTION

The Icy Cape HM District subtends more than 200 km² fronting the Pacific Ocean and backing to the foot of the Robinson Mountains at about 1700 m above sea level. We classify the district into geomorphic provinces; the eastern region as deltaic (Figure 1) and the western region as coastal plain (Figure 2) based on geomorphologic expressions. The coastal plain is entirely built up of unconsolidated outwash sediments and ancient beach sand deposits.

The area from the White River to Icy Cape has intermittently produced placer gold since the initial discovery in 1897. Gold production reports don't exist, but it is estimated that at least 16 000 troy ounces of gold have been mined from small-scale placer mining that concentrated on the active beaches and the White River sediments. It was not until the mid-1980s to the early 1990s that mining companies such as Noranda Exploration from Canada and Paraclete Resources from Australia began exploration for large-scale placer gold deposits. Paraclete Resources defined areas for gold placer mining as presented in Figure 2 and delineated a 3.5 million troy ounce resource (Rossetti, 1992). Note that this resource estimate is a historical estimate and is not compliant with CIM and SME definition standards for Mineral Resources and Mineral Reserves.

Placer Au occurs primarily as fine-grained (averaging 0.250 mm in diameter) flat and rounded plates and is strongly associated with garnet-rich layers (inset in Figure 2). Gold recovery tests demonstrated recoveries in excess of 93%, at an estimated 81% purity (Trust Land Office document archives).

In 1996 the land and minerals ownership of the Icy Cape land block was transferred from the State of Alaska to the Alaska Mental Health Trust Authority. The land and mineral resources are managed by the Trust Land Office (TLO). Natural resources between mean high tide and 3 nautical miles (5.56 km) offshore are managed by the State of Alaska. The nature and distribution of HMs in offshore sediments is unknown.

Over the next decade the TLO will develop timber resources in the heavily vegetated region of the coastal plain and delta regions. This will allow synergy with mineral resources development strategies.



Figure 1. Map showing locations of analysed samples and sedimentary sequences in the eastern Icy Cape District.



Figure 2. Map showing locations of analysed samples, sedimentary sequences and outlined areas for gold placer mining in the western Icy Cape District.

BACKGROUND

The first published systematic study of HMs in the region that included the district is one of titanium mineral resource potential by Foley *et al.* (1995). Foley *et al.* sampled at about 2 km intervals traversing the modern beach environment using solid-stem power and hand augers in the intertidal zone, beach face, and back beach, and channel sampling wave-cut beach terraces. Samples collected during that study average 1.5 m intervals ranging to 9.6 m in depth. Foley *et al.* (1995) estimate 0.57% valuable heavy minerals (VHMs; 0.49% ilmenite; 0.05% rutile; 0.03% zircon) in a range of <0.1% to 2.9% in modern shoreline sands of a portion of the district west of the Little River. They note that dynamic depositional processes produce large variations in grain size distribution and in HM content. These large variabilities make the determination of statistical central tendencies difficult. Median and mode values are better measures of this tendency, but we present mathematical averages bracketed by ranges.

Foley *et al.* (1995) note that HM fractions contain polymineralic grains, 'rock fragments', interlocked grains of magnetite, pyroxene, plagioclase, sphene, and ilmenite. They note the expansive deltaic sediments at Icy Cape and their reconnaissance Ti, Zr, and Au assays for samples from this area indicate that VHMs are present. Associated with placer gold in the region are trace quantities of platinum group metals (PGMs); (Foley *et al.*, 1995, Table 3).

Formerly confidential industry assessments of Au shown in Figure 2 (TLO document archive) note the sands contain other potentially recoverable minerals. Of these, zircon, garnet, and ilmenite were most likely recoverable, with PGMs regarded as a possibility as their value is recorded and apparently

associated with magnetite. These reports also note rutile as present and in need of evaluation as a potential commercial by-product from proposed gold operations.

The stratigraphy of the coastal region (coastal plain and delta) is not well known. Corporate models are based on the major unconsolidated sediment types. They are classified according to lithological character and origin: well-sorted sand and gravel formed at or near the present beach and on former beaches, including strand lines elevated by Holocene tectonic uplift; well-sorted dune sand on or near the present or former beaches; interbedded mud and sand containing much organic debris, which were formed on tidal flats, in bays or lagoons, and in clear lakes and swamps; and interbedded mud and poorly sorted to moderately well-sorted sand and gravel, which were formed on the flood plains or fans of streams on the outwash aprons of glaciers, including terminal and ground moraine and icerafted deposits. The thickness of the unconsolidated deposits on the coastal lowland and along the raised beach ridges is not known but is estimated to be of the order of tens of metres.

CURRENT WORK

Our studies relied on methods, procedures, and techniques commensurate with those of the placer Ti-Zr-REE HM industry. Particle-size distribution (PSD) analyses were conducted by use of US Standard stainless steel sieves and are reported for some bulk samples and for their HM content. An average of 120 g was separated in lithium metatungstate (LMT), a heavy liquid with a specific gravity of >2.96. Technical aspects are detailed by Foley *et al.* (1995) and by Grosz *et al.* (1990).

A Frantz barrier magnetic separator was used to separate minerals in the HM concentrate into seven fractions. After a low field-strength (0.05 A) pass through the apparatus set at 15 degrees forward- and 25 degrees side-slopes, the HMs were concentrated according to their magnetic susceptibilities at 0.15, 0.25, 0.35, 0.50, and 1.00 A, yielding a nonmagnetic 1.00 A residue, and their weights were recorded. This approach isolated, for example, over 90% of garnets into the 0.25 A fraction, over 95% of rutile and zircon into the nonmagnetic residue, and epidotes, pyroxenes, and amphibole minerals into intermediate fractions. Because of variations in a mineral's chemical composition and the presence of inclusions and complex intergrowths, a mineral may occur in more than one magnetic fraction. Magnetic fraction reduces the number of mineral species in each fraction and thus facilitates qualification and quantification of HM species.

Each magnetic fraction was examined by reflected and transmitted light microscopy. Modal mineralogical compositions were determined by point counts of at least 500 grains in combination with visual estimates of field percentage compositions. Percentages of the various minerals were calculated on the basis of their weight in each fraction. The calculated weights of a mineral in the various magnetic fractions were then added together and divided by the total weight of the HMs. The densities of individual mineral species were not compensated for by this method. XRD, XRF, SEM, and microprobe analyses were used to confirm petrographic mineral determinations and to detail compositions.

In this paper, we provide PSD, HM content, modal mineralogical, and adjunct analytical data for samples. We also generated conductor, non-conductor, and trace element determinations that are not included in this brief report.

More than 100 samples from Foley's (1995) study were retrieved from archives at the Geologic Materials Center in Anchorage, AK. From these, 87 samples averaging 275 g were collected by use of Jones splitters, and five samples of garnet-rich beach concentrate collected by the TLO in 2015 were included. The average HM content of the 87 samples is 19.3% in a range of 0.7–72.6%. The PSD of these sands is predominantly less than 0.297 mm and greater than 0.149 mm. With the exception of a few beach samples containing significant very coarse sand- to gravel-sized material, samples were predominantly less than 0.595 mm and greater than 0.105 mm in particle size.

The analytical results for 21 samples representing seven locations as selected for this report are presented in Table I. They represent thicknesses of sediments above mean high tide as modern beach sediments are outside the TLO property boundaries. Each location has defined sampling intervals. For example, SN 86.1 through SN 86.4 denote a core location with successively deeper sampled interval. Sample numbers from Foley *et al.* (1995) are present as map numbers for ease of cross-reference. Table I shows their locations (coordinates in metres, North American Datum 1983, UTM Zone 7), depth intervals in metres, and %HM (SG >2.96) expressed as a percentage of the bulk sample collected. Analyses of these widely distributed power-auger, hand-auger, and channel samples show an average 26.0% HMs in a range of 1.1–72.6%.

SN	UTM E	UTM N	From m	To m	Interval m	Wt% HM
86.1	433723	6657013	0.0	2.1	2.1	44.89
86.2	433723	6657013	2.1	4.0	1.9	33.82
86.3	433723	6657013	4.0	5.8	1.8	24.12
86.4	433723	6657013	5.8	7.3	1.5	72.58
91.1	434966	6656749	0.9	2.1	1.2	13.85
91.2	434966	6656749	2.1	4.0	1.9	64.91
91.3	434966	6656749	4.0	5.8	1.8	38.72
107.1	438874	6655268	0.9	2.7	1.8	38.87
107.2	438874	6655268	2.7	5.8	3.1	17.18
107.3	438874	6655268	5.8	6.7	0.9	10.44
129.1	444575	6654017	0.0	2.1	2.1	33.86
129.2	444575	6654017	2.1	4.0	1.9	12.88
129.3	444575	6654017	4.0	5.8	1.8	6.97
129.4	444575	6654017	5.8	7.6	1.8	1.50
129.5	444575	6654017	7.6	9.6	2.0	1.10
133	445248	6653788	0.0	0.8	0.8	21.27
139.1	446545	6653484	0.0	2.1	2.1	48.78
139.2	446545	6653484	2.1	4.0	1.9	10.92
139.3	446545	6653484	4.0	5.8	1.8	8.32
139.4	446545	6653484	5.8	7.2	1.4	2.91
152	462481	6649158	0.0	4.6	4.6	38.99

 Table 1. Analytical results for 21 bulk sediment samples showing sample locations, depth intervals sampled, and HM content.

RESULTS

Medium- to fine-grained sands with locally large coarse- or fine-grained components dominate the coastal plain and delta portions of the district. With the exception of a few samples of relatively very coarse sand to gravel-sized material, mineral grains are 0.6 mm to 0.11 mm sized particles. The PSD of 21 sediment samples and some of their HMs are given in Table II. Particle sizes are given in millimetres. Note the high variability in size distribution of both bulk sediments and their HMs.

Mineralogy

The HMs of coastal plain and deltaic sediments in the district include a large and varied assemblage. Table III shows the distribution of HMs in 21 samples. Magnetite (MAG), ilmenite (ILM), garnet (GAR), rutile (RUT), zircon (ZIR), others (OTH), and VHM (valuable HMs include only MAG, ILM, GAR, RUT, and ZIR) as modal percentages of the HMs are given in Table III. A value of 0.00 denotes <0.01%. Images of minerals are shown as insets in Figure 1 and Figure 2, and they are described in the following section. Small, flat (with irregular and/or curled edges) gold particles as well as uraninite and thorite particles were noted also in many samples (example in inset Figure 1).

XRF analyses confirm chemical compositions commensurate with the presence and relative abundances of Ca, Al, and Mg silicate minerals that have not been examined for potential value as abrasives, water filtration agents, drilling mud components, or other commercial applications.

	BU	BULK SIZE DISTRIBUTION (Wt% retained)					НМ	SIZE D	ISTRIBU	TION (W	t% reta	ined)
SN	0.595	0.420	0.297	0.250	0.149	<0.149	0.595	0.420	0.297	0.250	0.149	<0.149
86.1	0.7	1.6	10.5	13.9	70.2	3.2	0.1	0.4	4.2	5.3	84.4	5.6
86.2	4.6	3.8	17.2	17.6	53.2	3.6	0.9	0.8	3.6	10.1	79.7	4.8
86.3	10.8	6.1	21.7	17.9	40.2	3.3	2.8	1.8	9.6	7.2	77.1	1.5
86.4	12.5	6.3	21.4	17.5	39.0	3.4	16.9	0.7	2.6	2.1	49.4	28.2
91.1	3.8	2.6	6.8	10.3	65.6	10.9						
91.2	0.6	0.1	1.0	2.8	66.4	29.2						
91.3	2.5	2.6	10.8	10.8	70.5	2.8						
107.1	2.3	0.7	7.5	15.9	66.7	6.9						
107.2	0.5	0.9	11.9	20.2	64.2	2.2						
107.3	6.2	7.3	21.5	18.5	40.8	5.6						
129.1	0.1	0.3	10.2	23.3	65.2	0.8	0.0	0.0	0.9	1.3	95.0	2.8
129.2	2.4	3.2	18.7	25.6	48.3	1.8	0.0	0.0	4.4	8.6	85.0	1.7
129.3	4.0	2.9	17.8	23.0	51.7	0.7	6.2	2.3	4.5	9.0	67.9	10.1
129.4	1.2	1.0	6.7	11.3	52.5	27.2	19.7	3.9	12.1	9.1	53.0	2.2
129.5	0.1	0.4	8.6	17.4	72.2	1.4						
133	0.0	0.1	5.1	19.6	73.1	2.1						
139.1	1.8	3.0	20.4	24.6	47.6	2.7	0.0	0.0	2.0	1.7	3.2	93.0
139.2	1.8	2.3	19.9	24.4	50.6	1.0	2.8	1.4	12.3	10.6	38.6	34.2
139.3	2.5	3.5	21.6	25.1	44.7	2.6	1.5	2.0	2.5	59.9	31.3	2.9
139.4	2.0	0.7	7.2	15.3	68.0	6.8						
152	52.7	16.6	13.1	4.3	8.5	4.8						

Table II. Particle size distribution of 21 bulk sediment samples and some of their HMs. Blank cells have no data.

Table III. Modal mineralogical composition of 21 samples.

	MINERAL COMPOSITION (Wt% of HM)						
SN	MAG	ILM	GAR	RUT	ZIR	OTH	VHM
86.1	0.73	0.17	10.21	0.47	0.42	88.00	12.00
86.2	0.79	0.17	8.70	0.43	0.31	89.60	10.40
86.3	0.15	0.66	12.70	0.08	0.11	86.30	13.70
86.4	0.14	0.00	1.66	2.89	2.76	92.55	7.45
91.1	1.86	0.07	8.42	0.34	0.23	89.08	10.92
91.2	1.47	0.54	11.75	0.76	0.53	84.96	15.04
91.3	1.70	0.05	6.72	1.94	0.74	88.84	11.16
107.1	1.90	0.18	9.11	0.37	0.45	87.99	12.01
107.2	0.28	0.00	3.94	0.20	0.66	94.92	5.08
107.3	0.48	0.03	3.52	0.32	0.50	95.16	4.84
129.1	0.85	0.00	0.76	0.17	0.02	98.20	1.80
129.2	0.51	0.00	0.42	0.06	0.00	99.01	0.99
129.3	0.44	0.06	0.56	0.02	0.02	98.90	1.10
129.4	0.59	0.08	0.68	0.01	0.04	98.60	1.40
129.5	0.56	0.00	1.24	0.00	0.03	98.17	1.83
133	1.51	0.03	0.34	0.03	0.00	98.09	1.91
139.1	1.93	0.76	34.73	0.07	0.14	62.37	37.63
139.2	1.95	0.03	7.75	0.28	0.08	89.91	10.09
139.3	1.31	0.00	1.82	0.26	0.00	96.61	3.39
139.4	1.43	0.00	0.65	0.06	0.07	97.78	2.22
152	0.40	0.00	0.67	0.04	0.01	98.88	1.12

MAG and ILM are strongly magnetic components of the HMs. They are technically best labelled as oxides as they include Ti-free iron oxides with sphene and amphibole inclusions, haemo-ilmenite, chromite, octahedral and rounded magnetite, and magmatic haematite-ilmenite-magnetite showing exsolution features at 2 μ m to >50 μ m scale. Other inclusions in the oxide group include sphalerite, pyrite, and REE-rich phases in a range of 2 μ m to 10 μ m in size. Ilmenite is present in all samples but it is not a liberated 52.7% TiO₂ mineral. The ilmenite appears not to be suitable for pigment manufacture because of trace impurities that include Si, Cr, V, and Al (Foley *et al.* 1995). Figure 4A shows a SEM backscattered image of a typical titaniferous magnetite with titanium-rich exsolution lamellae (thin black bands). Black spots are Al-rich spinel. Figure 4B shows intergrowth of magnetite and ilmenite. Black areas near centre are hornblende inclusions. Oxides average 1.13% of the HM suite in a range of 0.14% to 1.98% (Table III).



Figure 4. SEM backscattered electron image of oxide mineral particles classified as magnetite and ilmenite (MAG and ILM; Table III).

Garnet

The garnet group was examined in more detail than other HMs as the historically mentioned co- or by-product potential of garnet had not been addressed. Garnet comprises an average of 6.02% of the HM suite in a range of 0.34% to 34.73% (Table III). Our analyses reveal that end-members almandine, pyrope, grossular, and spessartine (not including andradite and uvarovite) comprise 67%, 12%, 6%, and 15% respectively of the garnet group. We distinguish pink, orange, and dark garnets that are mostly euhedral to slightly rounded, with a crushed shard component. Figure 5 shows the principal types: A is pink, B is orange, and C is dark. A is euhedral, B is rounded and contains zircon (white) and quartz (black) inclusions, and C is rounded garnet with quartz (black) and ilmenite (white) inclusions. Many garnets have varying amounts of inclusions that include monazite-(Ce) (up to 25 μ m), pyrite (up to 50 μ m), ilmenite (up to 50 μ m), and xenotime (up to 20 μ m). Microprobe analyses show garnets have an average Y content of 726 ppm in a range of 0 to 2150 ppm, with pink and orange types having the highest overall values. The reader interested in Y distribution in garnet-group

minerals is referred to Jaffe (1951), Pyle and Spear (1999), references therein, and to subsequent publications.



Figure 5 . SEM backscattered electron image of typical garnet particles (GAR, Table III).

Rutile

The rutile group (\geq 90%TiO₂) includes rutile, anatase, and sphene. This group of minerals averages 0.42% of the HM suite in a range of <0.01% to 2.89% (Table III). Particles appear liberated and are finer-grained than other HM including gold.

Zircon

Zircon is present as fine-grained, clear, doubly terminated euhedral crystals and as crushed shard fragments that are low in U and Th (<300 ppm combined). Figure 6 shows euhedral zircon (A) and a broken fragment of euhedral zircon (B). ZIR comprises an average of 0.34% of the HM suite in a range of <0.01% to 2.76% (Table III). Some zircons contain chalcopyrite inclusions up to 20 μ m, monazite inclusions up to 10 μ m, uraninite inclusions up to 5 μ m, thorianite inclusions up to 2 μ m, and thorite inclusions on the order of 1 μ m. Arsenopyrite is also occasionally present as inclusions. Zircons are also finer-grained than other HMs, including gold.



Figure 6. SEM backscattered electron image of typical zircon particles (ZIR, Table III).

Other

For the purposes of this study large and varied groups of HMs are classified as 'others' (OTH, Table III) and retained for follow-up analyses. This group accounts for an average 92.09% of the HM suite in a range of 62.37-99.01%. It includes dominant epidote, zoisite, clinozoisite, pyroxene, amphibole, olivine, serpentine, unidentified opaque and non-opaque sand- and finer-grained particles made up of HM and non-HM fragments. Included in this group are very small but persistent traces of spinels, monazite, cassiterite, uraninite (100 μ m particles), chromite (high Al/low Fe), thorite, thorianite, albite, barite, scheelite, and localized carbonate fragments.

VHM

Reported VHM reflect on potential as co- and by-product HMs from gold recovery operations. Excluding gold, VHMs average 7.91% of the HM suite in a range of 0.99–37.63% (Table III). Values are considered underestimates because the OTH group contains a larger, though lower-value suite of industrial minerals than VHMs. Nonetheless, VHMs reach very large values in comparison to traditional titanium-zirconium deposits.

CONCLUSIONS

The Icy Cape District is host to a large and varied body of unconsolidated sediment with documented placer Au resources and associated HM resources that are primarily industrial in nature. We estimate the district to contain in excess of 1.7×10^9 t resource-bearing sediments to 10 m depth. Our analyses confirm potential for mineable HMs with associated Au concentrations. The geological framework, textural, mineralogical, and chemical data indicate a large, but as yet incompletely understood, resource potential for Au, garnet, and other HMs. Very large vertical and lateral variations in PSD and HM content and composition are noted, likely as a function of depositional environment. These, and supportive adjunct formerly proprietary information, refine factors controlling commercial HM viability in the Trust Land area and provide a better understanding of resource potential leading to exploration and development. The TLO will conduct high-resolution aeromagnetic surveys of the district in 2016 and stratigraphic and resources drilling campaigns in 2017.

ACKNOWLEDGMENTS

This work was funded by the Trust Land Office and by ILUKA Resources. The authors would like to thank John Morrison, Wyn Menefee, Leann McGinnis, Paul Slenkamp, and Mike Franger of the Trust Land Office for their enthusiastic support. As well, we note the invaluable assistance and cooperation of ILUKA Resources; specifically of Thomas Hartzog, Adam Karst, Charles Acker, and Doug Holtman. We appreciate the easy availability of data, samples, facilities, and curator support of the Geologic Materials Center of the Alaska Department of Natural Resources in Anchorage, Alaska (http://dggs.alaska.gov/gmc/general-info.php), and in particular the assistance and support provided by Kurt Johnson, Jean Riordan, and Alexandra Busk. James Barker, retired USBM research geologist, provided invaluable information on previous research and exploration campaigns. We also would like to thank Jim R. Tuttle of Sealaska Timber Corporation for his support of this project. Last but not least, we are sincerely indebted to the knowledge, skills, expertise, and time that Harvey E. Belkin and Frank T. Dulong of the USGS provided for their expertise in SEM and microprobe, and XRD, respectively. Their world-class analytical expertise was invaluable to our study.

REFERENCES

TLO archived documents:

- Robson, J.M. (1983). Yakataga Beaches Reconnaissance Report, Project 50034-1983. Noranda Exploration Inc., Anchorage, Alaska, USA. 30 pp.
- Rossetti, L. (1992). The Yakataga Gold Project, Alaska, USA Predevelopment Statement. Paraclete Resources Pty Ltd, Beulah Park, SA, Australia. 45 pp., 9 appendices.

Public domain documents:

- Foley, J.Y., LaBerge, R.D., Grosz, A.E., Oliver, F.S., and Hirt, W.C. (1995). Onshore titanium and related heavy-mineral investigations in the eastern Gulf of Alaska region, southern Alaska. *Open-File Report* 14-90, US Bureau of Mines. 125 pp.
- Grosz, A.E., Berquist, C.R., Jr., and Fischler, C.T. (1990). A procedure for assessing heavy-mineral resources potential of continental shelf sediments. *Heavy Mineral Studies--Virginia Inner Continental Shelf*. Berquist, C.R., Jr., (ed.). *Publication* 103, Virginia Division of Mineral Resources. pp. 13-30.
- Jaffe, H.W. (1951). The role of yttrium and other minor elements in the garnet group. *American Mineralogist*, 36 (1), Jan-Feb. 1951, 133-155.
- Pyle, J.M. and Spear, F.S. (1999). Yttrium zoning in garnet: coupling of major and accessory phases during metamorphic reactions. *Geological Materials Research* 1. <u>http://www.minsocam.org/gmr/papers/v1/v1n6/v1n6.pdf</u>



Dr Karsten Eden

Minerals & Energy Section Chief Trust Land Office

Dr Karsten Eden is the Minerals and Energy Section Chief at the Alaska Mental Health Trust Land Office in Anchorage, Alaska and manages the Icy Cape Gold and Industrial Heavy Minerals Project. Karsten is a Certified Professional Geologist with 20 years international experience in the supervision and management of mineral exploration and mine development projects in Alaska, Western Australia, West Africa, Scandinavia and Europe. Throughout his career, Karsten has provided consulting services to many international mining companies and has held several corporate geologist positions. He holds a doctorate degree in exploration geology from the University of Technology in Aachen, Germany.

Exhibit C: Phase 3 Cost Estimate

- Sonic drilling (10,000 ft plus):
- Camp/infrastructure upgrades:
- Project logistics:
- Sample analysis:
- Contractor field support:
- Legal:
- Administration:
- Contingency:

Total:

\$700,000 \$300,000 \$375,000 \$175,000 \$200,000 \$100,000 \$50,000 \$100,000







2600 Cordova Street, Suite 100 Anchorage, Alaska 99503 Phone: 907-269-8658 Fax: 907-269-8605

Consultation

То:	Carlton Smith, Chair
	Resource Management Committee
From:	Mike Franger
Date:	10/12/2016
Re:	Negotiated Oil and Gas Leases -
	Alaska Natural Gas Corp (Item A)
Fiscal Year:	2017

Proposed RMC Motion:

"The Resource Management Committee recommends that the Alaska Mental Health Trust Authority board of trustees concur with the negotiated leasing of nineteen oil and gas lease tracts for exploration and development of Trust natural gas resources, as proposed."

Background:		
Revenue Projections:	Principal Income	\$0 Up to \$2,379,000 in bonus bids and \$951,700 in annual rental payments

Transaction/Resource: Negotiated leasing of 19 Trust oil and gas lease tracts in the Cook Inlet area for the purpose of exploration, development, and production of the Trust's unconventional (coal bed methane) natural gas resources to Alaska Natural Gas Corporation (ANGC).

Property Description/Acreage/MH Parcel(s): The requested lease acreage includes various Trust parcels encompassed within oil and gas lease tracts 4-15, 17, and 37-40, located on the west side of Cook Inlet within Townships 12 North, Ranges 12 and 13 West; 13 North, Ranges 10-13 West; and 14 North, Ranges 12 and 13 West, Seward Meridian, as depicted on the attached map.

General Background: Alaska Natural Gas Corporation (ANGC) has proposed to lease a large block of acreage from the Trust in the Cook Inlet area to develop what is thought to be a significant coal bed methane (CBM) resource. ANGC has assembled a group of principals and consultants who are experienced in developing CBM. They have also been pursuing commercial agreements for the sale of CBM production to potential buyers in the Cook Inlet area. To date the production of CBM in Alaska has not occurred on a commercial scale, but improvements in drilling and production techniques have made the development of this resource more viable and a potential source for a clean, marketable fuel that could meet the requirements of the proposed projects in the Cook Inlet area if it can be produced in commercial quantities.

Anticipated Revenues/Benefits: Bonus bids based on \$25/acre are being negotiated for each tract leased. Issued leases for each tract will have a primary term of 10 years that can be extended by production, with annual rentals of \$10/acre and an escalation clause increasing the rental rate in the eighth year if the lease is not diligently being developed. Commercial production of gas would be subject to a 15 percent royalty. Annual rentals can be offset against royalties in the year in which production occurs. The benefit of developing this unconventional natural gas resource in the proposed manner is that utility can be made of the Trust's significant deep coal resources in the Cook Inlet area that would otherwise be stranded since they are not economic to mine.

Anticipated Risks/Concerns: Production of CBM is an established process in North America and other parts of the world, but this resource has not been developed here in Alaska. Previous attempts to develop CBM in Alaska occurred in the early 2000's and were basically unsuccessful. The activity raised significant questions and opposition from various groups and the public, but much of the opposition at the time was due to the leasing process conducted by the Department of Natural Resources, the proximity of proposed leases to developed areas, and publicity associated with adverse impacts caused by unscrupulous operators developing the resource in the Lower 48. Questions may arise again during the leasing and permitting process regarding the nature of the proposed development. However, the tracts proposed for lease are located in remote areas, and the applicant has stated that they have engaged consultants and contractors experienced in the latest techniques to develop CBM in a safe and environmentally sound manner.

Project Costs: No unusual costs are expected to be incurred for this proposal beyond normal field inspections and lease administration.

Other Considerations: Development and production of CBM is a well established process that can make use of the Trust's large reserves of stranded coal resources by producing clean methane gas in an environmentally acceptable manner.

Due Diligence: TLO personnel have met several times with the applicant and have reviewed available information, lease terms, and the leasing process. The lease tracts involved in this transaction have been offered for lease in the past, and some of the tracts have been previously leased in that process.

Alternatives: (1) Do not make the tracts available for the proposed purpose. (2) Offer the tracts on a competitive basis. (All of the tracts have been offered for lease in the past with mixed results).

Consistency with the Resource Management Strategy: The proposal is consistent with the "Resource Management Strategy for Trust Land" (RMS), which was adopted in January 2016 in consultation with the Trust and provides for the TLO to focus on land or resources that are in demand and at the high end of market values (best markets). Given the current value of natural gas in the Cook Inlet, the prospective lands affected by this decision are in "best market" situation and should be offered now. Additionally, the proposed action is a step toward generating potentially significant revenue from the Trust's natural gas resources, consistent with a key Trust land management principle of encouraging a diversity of revenue generating uses of Trust land and resources.

Trust Land Office Recommendation: Lease the requested tracts to ANGC, as proposed.

Applicable Authority: Alaska Statutes 37.14.009(a) and 38.05.801, and 11 AAC 99 (key statutes and regulations applicable to Trust land management and disposals).

Trust Authority Consultation: This briefing document fulfills the consultation requirements that are applicable to the transaction. In the event that significant changes to the transaction are made necessary by the public notice process, the Trust Authority will be consulted regarding the changes.

Exhibit(s):

Exhibit 1 - ANG Proposed Lease Area



Alaska Natural Gas Corporation Proposed Lease Area



MHT Tracts

Mental Health Trust Land

Kenai



2600 Cordova Street, Suite 100 Anchorage, Alaska 99503 Phone: 907-269-8658 Fax: 907-269-8605

То:	Carlton Smith, Chair	
	Resource Management Committee	
From:	Bryan Yackel	
Date:	10/12/2016	Consultation
Re:	Juneau Subport Subdivision Lot C2 Negotiated Sale –	
	(Item B)	
Fiscal Year:	2017	

Proposed RMC Motion:

"The Resource Management Committee recommends that the Trust Authority board of trustees concur with the negotiated sale by the TLO for the disposal of a portion of Trust Parcel C20499, further referred to as Lot C2, or portions thereof, at the Juneau Subport Subdivision."

Background:			
Revenue Projections:	Principal Income	approximately \$1,300,000 \$0	

Transaction/Resource: The proposed transaction is a disposal through negotiated sale with the Alaskan limited liability corporation Develop Juneau Now. The Offeror seeks to acquire a portion of Lot C2 located at the Juneau Subport Subdivision existing within Mental Health Trust (MHT) Parcel C20499. Lot C2 was created by the subdivision of Lot C occurring in calendar year 2009 through the dedication of Plat #2009-37 as recorded by the Juneau Recording District. For purposes of reference, Plat #2009-37 has been included as Exhibit 1. More specifically, the Offeror seeks to acquire a portion of Lot C2 anticipated to include 0.98 acre, more or less, and as further depicted in Exhibit 2.

The TLO anticipates a period of coordination with the Offeror in which the TLO will further evaluate the proposed development plan(s), and how the planning coordinates with the Trust's other holdings located within the subdivision. The TLO further anticipates negotiating and issuing an initial license for the operator to enter the property, conduct feasibility studies, and complete other necessary due diligence. The initial license could include an option to execute the proposed sale upon the Offeror's satisfaction of its due diligence and/or permitting of construction plans etcetera.

Property Description/Acreage/MH Parcel(s): Trust Parcel C20499, as shown on Exhibit 1 having the following legal description:

Lot C2 at the Juneau Alaska Subport Subdivision comprising 2.1 acres, more or less, located within Section 23, Township 41 South, Range 67 East, Copper Meridian, and as further depicted in Exhibit 1.

The parcel is located on the perimeter of the current downtown business and tourist district, and is zoned as Mixed Use 2 (MU2). The parcel has been vacant since the time it was conveyed to the Trust.

General Background: Parcel C20499 was received by Quitclaim Deed from the State of Alaska Department of Natural Resources in September of 1996. Lot C1 and C2 have not been recently marketed as both lots were under license (reference MHT #9100721) to Alaska Department of Transportation (AKDOT) for construction staging and parking in support of the recently completed State Library Archives Museum (SLAM) project. The license commenced on November 8, 2012 and expired June 30, 2016.

In recent years, and upon the anticipated conclusion of the AKDOT authorization, various uses had been discussed by several parties ranging from bars and restaurants, retail space, a hotel, tour bus parking and residential uses such as condominiums or senior living facilities. No formal proposals were offered relative to these potential uses, as in some cases other sites were selected, and in others, the inquiries appeared speculative in nature.

Anticipated Revenues/Benefits: At the writing of this document the following sales terms and conditions have been proposed. The initial offer includes an earnest money deposit of \$65,000 (sixty-five thousand) with a purchase price of \$1,300,000 (one million three hundred thousand) to be paid in cash. The earnest money deposit has been received. These terms and conditions are subject to change with final negotiations that would lead to an executed purchase and sale agreement.

Additionally, the current offer includes an equal split of all closing costs with exception to the Owner's title insurance. The need to complete a further subdivision of Lot C2 is also anticipated, and the offer apportions this cost as an equal split. The TLO will not pay a commission to the licensee on the sale. The current offer is not contingent on the completion of an updated appraisal, nor is it contingent on the sale of any other real property held by the Offeror.

Anticipated Risks/Concerns: Should this disposal occur; the Trust will remain as a majority landowner of lands within the Juneau Subport Subdivision through the ownership of Lot C1 including 2.9 acres as well as the remnant part of Lot C2 anticipated to include in excess of an acre. The anticipated remnant part of Lot C2 is encumbered with existing right-of-way creating Whittier Street. Another right-of-way running east-west creates an area of driveway that bifurcates Lot C2, and serves both the northern portion of Lot C2 desired for purchase and a parking area located to the south. The parking area is under a long term ground lease to the United States Coast Guard (USCG). This lease includes twenty years of remaining term expiring in calendar year 2036.

The risk created by the sale exists in how the site would be developed. The process of development and the end result of development both have the ability to add or diminish value to the Trust's

remaining holdings. Further understanding and evaluation of the intended use, and the timeline for completion of development will be a contingency to completing this sale.

Project Costs: Under the current proposal, closing and other anticipated transactional and/or administrative costs are to be equally split. This is also inclusive of the cost of platting of Lot C2, which is a necessity to the sale. Under the current scenario, the TLO's apportionment of these costs is in the estimated range of value of \$40,000-\$80,000. This is not inclusive of any infrastructure improvements triggered by the platting action. The area is served with existing utilities and the surrounding streets and pedestrian accesses are well established, so while the requirement for improvements remains to be determined, this is anticipated to be an insignificant cost. To the extent possible, the TLO will attempt to negotiate a sales price that is net of the above costs.

Other Considerations: None.

Due Diligence: As stated under Project Costs above, additional legal review to finalize the transaction documents will be required to facilitate this transaction and review the potential risks associated with it.

Alternatives: The alternatives to this proposal are:

- Offer the parcel for lease now, or at a later date. Current market conditions make leasing a parcel of this size and value difficult. This scenario offers no definitive timeline for revenue generation. While leasing prevents disposal of the asset, specific to this disposal, the Trust maintains a significant asset base through the remaining land holdings in the Juneau Subport Subdivision. Redirecting this principal to another resource or market may be appealing for purposes of diversification.
- Develop this parcel now, or at a later date. The TLO is not currently able to undertake a project of this magnitude, and even if so, moving forward with a development at this time would be speculative in nature, with increased risk to the option of disposal. Finding a tenant(s) that could partner in a development of this magnitude and recognizing revenue from a completed development has no definitive timeline.
- Do nothing. This scenario offers no definitive timeline for revenue generation.

Consistency with the Resource Management Strategy: The proposal is consistent with the "Resource Management Strategy for Trust Land" (RMS), which was adopted January 2016 in consultation with the Trust. The RMS acknowledges negotiated land sales as an acceptable action provided they are subject to a stringent adjudication process as outlined in this consultation.

Trust Land Office Recommendation: Proceed with the disposal through completion of a negotiated sale.

Applicable Authority: AS 37.14.009 (a), AS 38.05.801, and 11 AAC 99.

Trust Authority Consultation: This briefing document fulfills the consultation requirements that are applicable to the transaction. In the event that significant changes to the transaction are made necessary by the public notice process, the Trust Authority will be consulted regarding the changes.

Exhibit(s):

Exhibit 1 - Plat #2009-37, Juneau Recording District Exhibit 2 - Plat Map Delineating Area of Disposal







2600 Cordova Street, Suite 100 Anchorage, Alaska 99503 Phone: 907-269-8658 Fax: 907-269-8605

То:	Carlton Smith, Chair
	Resource Management Committee
From:	Paul Slenkamp
Date:	10/12/2016
Re:	P-1 Timber Sale - MHT 9100855 – Item I
Fiscal Year:	2017

Consultation

Proposed RMC Motion:

"The Resource Management Committee recommends that, at its November 17, 2016 board meeting or as soon thereafter as possible, the Alaska Mental Health Trust Authority board of trustees reconsider this consultation and advise whether or not it concurs with the proposed disposal of timber on Trust land near Petersburg, through a negotiated sale sometime after January 15, 2017, unless by that time legislation is enacted by Congress directing the Secretary of Agriculture to exchange with the Trust identified and approved National Forest land that is equal in value to the subject parcel."

Background:

Revenue Projections:

Principal \$ 2,673,250 (up to) Income \$ 471,522 (up to)

Transaction/Resource: The Trust Land office (TLO) will offer approximately seventeen million fivehundred thousand board feet (17,500 MBF) of timber on approximately 2,600 acres of Trust land through a negotiated sale.

Property Description/Acreage/MH Parcel(s): Twn. 59S, Rng. 79E portions of sections 3,10,14,15,23,26,35 containing 2,480 acres more or less, Parcel CRM-2099; Twn. 60S, Rng. 79E portion of section 2, containing 40 acres more or less, Parcel CRM-2283; Twn. 60S, Rng. 79E portion of section 2, containing 40 acres more or less, Parcel CRM-2282; and Twn. 60S, Rng. 79E, portion of section 2, containing 40 acres more or less, Parcel CRM-2281.

General Background: The TLO has engaged in the sale of timber as a major contributor to its traditional revenue portfolio. The proposed timber sale will dispose of commercially viable timber on Trust lands located near the community of Petersburg, Alaska. The proposed sale is composed of a variety of lands; some are near the community and on steep slopes located above the highway and some local residences. Other lands are located adjacent to previously harvested lands. The TLO consulted the Trustees on this timber sale contract on October 7, 2005 (MHT 9100411) as a negotiated sale. The sale was opposed by some local individuals and organizations. The result was that the TLO elected to pursue a land exchange with the USFS. After 10 years of diligent effort the TLO has determined that entering the NEPA process as required by the federal administrative land exchange

process will require expenditures of at least \$3 million and require a minimum of five years to complete the administrative land exchange process. It is also apparent that the likelihood of litigation is high, resulting in a further increase in time and expense to complete the administrative land exchange. In recent years, the USFS has significantly reduced its timber offerings and has announced a transition to young growth harvest only on the Tongass National Forest which will further decrease the availability of timber to the remaining timber industry in SE Alaska. The TLO is concerned that the expense and timeline of the exchange and the degradation of the existing timber industry will further erode the value of this timber asset.

S.3006, the Alaska Mental Health Land Exchange Act of 2016, was introduced by Senator Murkowski in May of 2016. This bill currently directs the USFS to complete the land exchange in 12 months. The bill in its current form is being opposed by several groups and negotiations are underway to address those concerns. If, Congress does not pass S.3006 this year, it is the TLO's recommendation to begin cutting timber on some of the Trust parcels identified to be exchanged to begin to make what revenue it can from the Trust's remaining SE Alaska timber assets while there still exists a viable timber industry in SE Alaska. Timber industry representatives have publicized that their companies will be forced to close down operations in SE Alaska if insufficient timber is supplied in the next 2-3 years. Analysis has shown that it is critical to bring Trust timber to market within a 2 to 3-year time frame because of the lack of timber supply from the USFS, University, and State timbersales.

This timber sale will be predominantly a helicopter sale because of location, but some may be cut utilizing conventional harvest methods. The harvest will likely occur in more than one year. Harvest methodology will follow all existing and applicable statutes.

Anticipated Revenues/Benefits:

- 1. The timber sale will generate approximately \$3,145,000 in revenue in FY17 & FY18.
- 2. Some local jobs may be created related to the sale.
- 3. Harvest of timber will maximize revenue while providing for timber regeneration and future timber harvests.
- 4. This timber sale will be a key contributor providing enough timber to keep some of the remaining timber harvest businesses operating in Southeast Alaska for a period of time during USFS transitions to young growth, a key to keeping other Trust forest assets marketable in the future.

Anticipated Risks/Concerns: There is some anticipated public concern associated with the proximity of the sale area to the community of Petersburg. This sale will be associated with parcels in the AMHT/USFS land exchange and will be strongly opposed by the community because of their desire to see the land transferred to the USFS without being cut. However, the TLO has a sole loyalty obligation to the Trust rather than the public interest at large. Though the harvest is directly in line with its loyalty to the Trust, it does not diminish that there will be public concerns about viewsheds, landslides, blowdown, and other harvest related issues.

Project Costs: Costs will be low and be primarily staff time. Timber cruise and other data collection was done for the prior sale and is still valid.

Other Considerations: Over the past several years the timber industry in Southeast Alaska (its infrastructure and harvest levels) has changed dramatically. There are fewer operators, timber owners, purchasers, and markets as in the past. The cost of timber operations have increased while market values have fluctuated both higher and lower depending on species and quality. A positive aspect is that demands for lower timber grades/sorts have increased due to the China market. The higher grade Spruce and Hemlock have both seen significant declines in demand while prices have fluctuated, but have not reached historic highs. There is concern that markets will continue the trend toward alternate products. The cost of helicopter harvest necessary for this sale continues to increase. It is, therefore, prudent for the Trust to harvest the identified parcel as soon as possible.

Due Diligence: TLO staff members have visited the project area and conducted sale layout and timber cruises. On-going field inspections and financial tracking will be conducted by TLO staff during the timber sale.

Alternatives:

Do Nothing: This alternative assumes that timber values will not be maximized by harvesting at this time. Timber is a commodity and the current markets allow for solid financial returns that have not been available in the past and may or may not be available in the future. Not supplying timber at this time may create a situation in the future where there are no timber companies operating in Southeast Alaska in the future, making it impossible to make revenue from Trust timber assets. **Alternate Development**: Due to the character and location, the parcel does not lend itself to other development opportunities that would produce a return to the Trust comparable to a commercial timber harvest.

Proposed Alternative: This alternative will provide the Trust with revenue. The harvest should not adversely impact other future development.

Consistency with the Resource Management Strategy: The proposal is consistent with the "Resource Management Strategy for Trust Land", which was adopted January, 2016 in consultation with the Trust which allows the TLO to focus first on land or resources at the high end of the market values ("best markets"). Given the current market values of timber, the prospective lands affected by this decision are in a "best market" situation and should be offered now rather than later.

Trust Land Office Recommendation: Proceed with the competitive P-1 Timber Sale on Parcels CRM-2099, CRM-2281, CRM-2282, and CRM-2283, if S. 3006 does not pass during this session of Congress.

Applicable Authority: This briefing document fulfills the consultation requirements that are applicable to the transaction under AS 37.14.009(a), AS 38.05.801, and 11 AAC 99.

Trust Authority Consultation: This briefing document fulfills the consultation requirements that are applicable to the transaction. In the event that significant changes to the transaction are made necessary by the public notice process, the Trust Authority will be consulted regarding the changes.

Exhibit(s): Exhibit 1 - Timber Sale Map





2600 Cordova Street, Suite 100 Anchorage, Alaska 99503 Phone: 907-269-8658 Fax: 907-269-8605

То:	Carlton Smith, Chair
	Resource Management Committee
From:	Paul Slenkamp
Date:	10/12/2016
Re:	K-3 Timber Sale MHT 9100854 – Item II
Fiscal Year:	2017

Consultation

Proposed RMC Motion:

"The Resource Management Committee recommends that, at its November 17, 2016 board meeting or as soon thereafter as possible, the Alaska Mental Health Trust Authority board of trustees reconsider this consultation and advise whether or not it concurs with the proposed disposal of timber on Trust land near Ketchikan, through a negotiated sale sometime after January 15, 2017, unless by that time legislation is enacted by Congress directing the Secretary of Agriculture to exchange with the Trust identified and approved National Forest land that is equal in value to the subject parcel."

Background:

Revenue Projections:

Principal \$ 1,785,000 (up to) Income \$ 335,000 (up to)

Transaction/Resource: The Trust Land office (TLO) will offer approximately ten million board feet (10,000 MBF) of timber on approximately 898 acres of Trust land through a negotiated sale.

Property Description/Acreage/MH Parcel(s): Twn. 75S, Rng. 91E portions of sections 27, 28, 29, 32, 33, 34 and 3, containing 895 acres more or less, Parcel CRM-3158-01 and Twn. 75S, Rng. 91E portions 29, containing 5 acres more or less, Parcel CRM-5086.

General Background: The TLO has engaged in the sale of timber as a major contributor to its traditional revenue portfolio. The proposed timber sale will dispose of commercially viable timber on Trust lands located near the community of Ketchikan, Alaska. The proposed sale is composed of lands near the community that have high visibility from the community and have a highly used public trail. Deer Mountain trail transects the western portion of the parcel with the peak of Deer Mountain comprising the NW corner. The remainder of the parcel is visible from the Tongass Narrows which is utilized by cruise ships and the Alaska Marine Highway. The parcel was included in a three-parcel land sale with the USFS in 2002. Two parcels (Petersburg Creek and Mt. Vestovia) were sold. This parcel was dropped by the congressional delegation for purchase consideration at the request of the Alaska Forest Association. Because of some of the challenges of these previous sales, the TLO elected to pursue a land exchange with the USFS and this parcel is included in the proposed AMHT Land

Exchange. After 10 years of diligent effort the TLO has determined that entering the NEPA process as required by the federal administrative land exchange process will require expenditure of at least \$3 million and require a minimum of five years to complete. It is also apparent that the likelihood of litigation is high, resulting in a further increase in time and expense to complete the administrative land exchange. In recent years, the USFS has significantly reduced its timber offerings and has announced a transition to young growth harvest only on the Tongass National Forest which will further decrease the availability of timber to the remaining industry in SE Alaska. The TLO is concerned that the expense and timeline of the exchange and the degradation of the existing industry will further erode the value of this timber asset.

S.3006, the Alaska Mental Health Land Exchange Act of 2016, was introduced by Senator Murkowski in May of 2016. This bill currently directs the USFS to complete the land exchange in 12 months. The bill in its current form is being opposed by several groups, but negotiations are underway to address those concerns. If S.3006 is not successfully passed this year in Congress, it is the TLO's recommendation to begin cutting timber on some of the Trust parcels identified to be exchanged to begin to make what revenue it can from the Trust's remaining SE Alaska Timber Assets while a viable timber industry in SE Alaska continues to exist. Timber industry representatives (other than Sealaska Timber Corporation) have publicized that their companies will be forced to close down operations in SE Alaska if insufficient timber is supplied in the next 2-3 years. Analysis have shown that it is critical to bring Trust timber to market within the 2 to 3-year time frame because of the lack of timber supply from the USFS, University, and State timber sales.

This timber sale may be predominantly a helicopter sale because of location, but some may be cut utilizing conventional harvest methods. The harvest will likely occur in more than one year. Harvest methodology will follow all existing and applicable statutes.

Anticipated Revenues/Benefits:

- 1. The timber sale will generate approximately \$2,120,000 in revenue in FY17 & FY18.
- 2. Some local jobs may be created related to the sale.
- 3. Harvest of timber will maximize revenue while providing for timber regeneration and future timber harvests.
- 4. This timber sale will be a key contributor, providing enough timber to keep some of the remaining timber harvest businesses operating in Southeast Alaska for a period of time during USFS transitions to young growth, a key to keeping other Trust forest assets marketable in the future.

Anticipated Risks/Concerns: There is some anticipated public concern associated with the proximity of the sale area to the community of Ketchikan. This sale will be associated with parcels in the AMHT/USFS land exchange and will be strongly opposed by the community because of their desire to see the land transferred to the USFS without being cut; however, the TLO has a sole loyalty obligation to the Trust rather than the public interest at large. Though the harvest is directly in line with its loyalty to the Trust, it does not diminish that there will be public concerns about viewsheds, potential landslides, blowdown, and other harvest-related issues.

Project Costs: Costs will be low and be primarily staff time. Timber cruise and other data collection was done for the prior sale and is still valid.

Other Considerations: Over the past several years the timber industry in Southeast Alaska (its infrastructure and harvest levels) has changed dramatically. There are fewer operators, timber owners, purchasers, and markets as in the past. The cost of timber operations has increased while market values have fluctuated both higher and lower depending on species and quality. A positive aspect is that demands for lower timber grades/sorts have increased due to the China market. The higher grade Spruce and Hemlock have both seen significant declines in demand while prices have fluctuated, but have not reached historic highs. There is concern that markets will continue the trend toward alternate products. Lastly, the cost of helicopter harvest the identified parcel as soon as possible.

Due Diligence: TLO staff members have visited the project area and conducted sale layout and timber cruises. On-going field inspections and financial tracking will be conducted by TLO staff during the timber sale.

Alternatives:

Do Nothing: This alternative assumes that timber values will not be maximized by harvesting at this time. Timber is a commodity and the current markets allow for solid financial returns that have not been available in the past and may or may not be available in the future. Not supplying timber at this time may create a situation in the future were there are no timber companies operating in Southeast Alaska in the future, making it impossible to make revenue from Trust timber assets. **Alternate Development**: Due to the character and location, the parcel does not lend itself to other development opportunities that would produce a return to the Trust comparable to a commercial timber harvest.

Proposed Alternative: This alternative will provide the Trust with revenue. The harvest should not adversely impact other future development.

Consistency with the Resource Management Strategy: The proposal is consistent with the "Resource Management Strategy for Trust Land", which was adopted January, 2016 in consultation with the Trust which allows the TLO to focus first on land or resources at the high end of the market values ("best markets"). Given the current market values of timber, the prospective lands affected by this decision are in a "best market" situation and should be offered now rather than later.

Trust Land Office Recommendation: Proceed with the competitive K-3 Timber Sale on Parcels CRM-3158-01 and CRM-5086, if S. 3006 does not pass during this session of Congress.

Applicable Authority: This briefing document fulfills the consultation requirements that are applicable to the transaction under AS 37.14.009(a), AS 38.05.801, and 11 AAC 99.

Trust Authority Consultation: This briefing document fulfills the consultation requirements that are applicable to the transaction. In the event that significant changes to the transaction are made necessary by the public notice process, the Trust Authority will be consulted regarding the changes.

Exhibit(s):

Exhibit 1 - Timber Sale Map

